

Teaching the Kindergarten Child

Under the General Editorship of

Willard B. Spalding

Chairman, Division of Education Portland State College

HAZEL M. LAMBERT

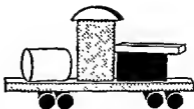
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Harcourt, Brace and Company New York

to Ann Elizabeth Archer
Mary Doucet
and kindergartners everywhere

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Editor's Foreword

Of the many significant developments in American education in the twentieth century, not the least in importance is the growth of the kindergarten movement—the increase in publicly and privately supported schools for four- and five-year-olds, and in the number and relative proportion of children of this age who attend kindergarten or nursery school.

This downward extension of education services broadens the school's responsibility for the development of future citizens. The kindergarten teacher is in a unique position; because there is no formal body of subject matter to be covered in the kindergarten, she is free to devote her energy, time, and attention to aspects of the child's growth which all too frequently are slighted at the upper educational levels. She can give him a great deal of help in learning to get along with others, for example; she can pay close attention to his physical and emotional well-being; and she can help him learn to express his joys and fears and perceptions in language and in various creative media.

The kindergarten teacher has certain special problems, for, as Dr. Lambert points out, the gap between kindergarten and first grade is a large one—perhaps the largest in the entire educational system. The task of the kindergarten teacher is to help the child to bridge that gap; she must nurture his growth in

every area—physical, social, and emotional as well as intellectual—so that he is prepared to attack the learning experiences—again, in every area—that he will encounter in first grade.

But the kindergarten teacher has an additional, perhaps related, task. Although she constantly strives to ease the child's future transition to first grade, she also aims to help him to live fully and richly in the present, to derive joy and satisfaction from his daily experiences.

The teacher who adopts Dr. Lambert's very sensible point of view will accomplish both of these tasks by neither forcing the child into a preconceived pattern of behavior nor allowing him to have "free rein" educationally. Rather, she will "cooperate with the growth process"—which means that she will acquire a knowledge of the principles of growth and development and an understanding of the individual child, and that she will help each child to realize his potentialities, guiding him always in the direction of increasing maturity.

Dr. Lambert's common-sense approach to the problems of teaching young children, her recognition—implicit in every page—that children are not miniature adults, and her strong emphasis on the development of democratic values in even the youngest of our citizens should make this book an invaluable guide to teachers and prospective teachers of kindergartners.

WILLARD B. SPALDING

Author's Preface

This is a book about four- and five-year-olds—how they grow and learn. It is also a book about teachers, and what they can do to encourage the growth and learning of the children in their charge. It is intended for kindergarten teachers as well as for college students who are planning to teach in the kindergarten.

The reader will find no "recipes" in this book, for the author believes that there is no single "best" way of teaching young children, just as there is no single description that fits all four- and five-year-olds. The central thesis of this book, in fact, is that kindergartners are different—from adults, from older children, and from one another—and that the teacher's understanding of these differences must underlie her expectations and objectives, as well as her choice of methods and materials. Recognizing the immaturity of four- and five-year-olds, the teacher does not apply standards of behavior and achievement that are beyond their capacity; she is satisfied with *small signs of progress*. Recognizing the fact that kindergartners have much growing up to do before they can participate effectively in a formal learning situation, she concentrates on providing an environment both stimulating and secure, in which they are free to test their increasing powers. And recognizing the wide range of individual differences among kindergarten children, she appraises each child's behavior in

terms of his own level of maturity and rate of development, using established norms only as occasional guideposts.

Kindergartners, like all other school children, are sent to school in order to learn, but the kindergarten teacher defines learning in the broadest possible sense, to include every aspect of development. Although she is always aware of the limitations imposed by the child's immaturity, she knows that a four-year-old is not too young to learn something of what it means to be a responsible member of our democratic society. In the modern kindergarten, therefore, children are given many opportunities to learn to make decisions, to direct their own behavior, to assume and carry out responsibilities. These learnings—perhaps the most important contribution of the kindergarten—need not and should not be deferred; with the teacher's guidance, even kindergartners can learn to regulate their own small affairs.

In the last analysis, most of what the child learns in the kindergarten is self-taught; if the teacher is guided by an understanding of the nature of children, if she permits each child to grow at his own rate, if she provides the proper educative environment, learning will inevitably occur. The author has attempted to present a realistic picture of the kind of environment that will facilitate learning, based on extensive teaching experience and observation of classroom situations and supported by summaries of pertinent research. The principles included here are applicable to any kindergarten situation, for good teaching can take place even in overcrowded classrooms and in classrooms with a paucity of equipment—provided that the teacher has the one essential piece of equipment, an understanding of children in general, and of the individual children in her group.

The discussion problems following each chapter are intended to stimulate thought and to highlight the practical applications of the text. For most of them there is no right or wrong answer; the teacher's response will be based on her philosophy of teaching, her grasp of the human relations involved, and her understanding of the principles of child growth

presented in the text. The additional readings suggested at the end of every chapter will enable the interested reader to pursue the study of the nature of young children still further.

The author wishes to express her deep gratitude to the many persons who helped in the writing of this book—to the friends, colleagues, and former students who offered advice and suggestions, and to the kindergartners, who offered inspiration. Miss Edith Rosendahl performed an invaluable service by typing the manuscript, in its several versions. Special thanks are due Dr. Willard Spalding, whose many sound comments contributed to the author's education as well as to the improvement of the book.

Hazel M. Lambert

Fresno, Calif.
September 1957

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Know you what it is to be a child? . . . It is to believe in love, to believe in loveliness, to believe in belief; it is to be so little that the elves can reach to whisper in your ear; it is to turn pumpkins into coaches and mice into horses, lowness into loftiness and nothing into everything. . . .

Francis Thompson, "Shelley," *Dublin Review*, July 1908

I. Philosophic Backgrounds of the Kindergarten

The kindergarten as we know it is largely a nineteenth-century invention, but its roots are remote in time. The problem of how to induct young children into the culture has engaged the energies of philosophers and educators throughout the ages. Understanding of the nature of children and recognition of their special needs have come slowly; many of the theories and practices of early educators have had to be discarded in the light of our present knowledge. But many of the solutions that they proposed have persisted, sometimes in modified form. The modern kindergarten is the fruit of centuries of thought and experimentation.

Plato and Early Childhood Education

Long before the birth of Christ, the Greek philosopher Plato pointed out the importance of the early years of childhood and the responsibility of the community for educating its young. Like others of his day, Plato believed that deformed children and the offspring of "inferior" people should be "put away in some secret place"; yet he was sufficiently advanced to make a community nursery part of his ideal commonwealth. One of his chief concerns in the *Republic* was to outline a system of education that would develop good citizens for the perfect state he envisaged. The

system that he formulated was to influence educational thought for many centuries. Plato claimed that each child was fitted by nature for some special task—from simple laborer to ruler—and that the goal of education was to prepare him for that task. He thus was "modern" in his idea that the individual differences among children should be recognized by the schools, although we today do not take so limited a view of the child's potentialities.

The Vision of Da Feltre

For several centuries after Plato's time, history records no outstanding educator who concerned himself primarily with the training of young children. In 1416, however, a copy of Quintilian's *Institutionis oratoriae*, written in the first century A.D., was discovered. The discovery of this work, which described in detail the old Roman theory of education, gave impetus to the development of "court schools" throughout Italy. Many children of the nobility and of the banking and merchant class were sent to these schools rather than to the established religious schools.

One of the most influential teachers in the court schools was Vittorino da Feltre (1378-1446), who established a school in Mantua for boys from the age of nine or ten through the age of twenty-one. Although da Feltre's pupils were older than today's kindergartners, the principles by which they were educated were both revolutionary for the time and strikingly similar to many of the principles of modern kindergarten education. The emphasis in da Feltre's school was on physical activities and the development of good manners and morals. He insisted on light, pleasant surroundings for children, and believed that education should be fun. He saw the value of alternating periods of study and play and recognized the need for variety in the child's activities to combat fatigue and boredom. Unlike the rather strict religious schools of his day, da Feltre's school emphasized self-government, as a means of character education as well as disci-

pline. He believed that teachers should lead, not coerce, children, and appreciated the importance of recognizing individual differences among pupils.

John Amos Comenius and *The Great Didactic*

Another of the earliest educators to appreciate the importance of training for young children was John Amos Comenius (1592-1670), a Moravian bishop who, when exiled from his native country, took charge of a school in Poland. As the result of his experiences, he wrote *The Great Didactic*, in which he formulated the principles underlying education as he saw it. He believed that all education must be carefully graded and arranged to follow the order of nature, proceeding from the easy to the difficult, from the near to the remote, from the general to the specific, from the known to the unknown. Like his contemporaries, Comenius believed in the innate depravity of man. However, he also believed that man's depraved tendencies could be redirected through proper education and nurture begun at an early age.

In teaching young children, Comenius urged that the teacher appeal to the child's sensory perceptions and that he use material based on the child's own experiences. To illustrate this theory, he published, in 1658, *Orbus sensualium pictus*, a book designed to teach Latin to young children through pictures of familiar objects. This book stood without a competitor for more than a century; an American edition was published as late as 1810.

Comenius formulated many other principles of modern childhood education. For example, he appreciated the child's need for physical activity, asserting that "the more a child is employed, runs about and plays, the sweeter is its sleep, the more easily does the stomach digest, and the more quickly does the child grow and flourish, in both mind and body." He emphasized the importance of play, which he considered an integral part of child life.

The French philosopher Jean-Jacques Rousseau (1712-1778) was one of the most vocal champions of the rights of children in the modern era. Although much of his psychology today seems faulty, he correctly laid great emphasis on the need for studying the child in order to design an adequate educational program for him. Unlike many of his contemporaries, Rousseau did not believe the child to be evil by nature. Rousseau recognized individual differences; he said that native equipment determines what the child will become. He protested against the tendency to consider children as miniature adults, insisting that each age of man has its own characteristics and needs, and that educators must take account of this. Rousseau's emphasis upon study of the child and his nature had great influence on the work of both Froebel and Pestalozzi and, indeed, on the best educational practice today.

Pestalozzi, the Practical Theorist

In contrast to Rousseau, the Swiss Johann Heinrich Pestalozzi (1746-1827) was a teacher who developed his theories in actual association with children. Like Rousseau, Pestalozzi believed that man was good by original nature. Education to him was largely a process of watching the child develop; the child was "a bud not yet opened."

Pestalozzi shared Rousseau's belief that individual differences condition development. "It may be judicious," he wrote, "to treat some pupils with marked attention and to give up the idea of bringing others to high perfection." Pestalozzi made it clear, however, that a child's social status or his appearance must not be allowed to limit his opportunity for education.

Like Comenius, Pestalozzi recognized the value of sensory impressions in teaching young children. He anticipated Dewey in asserting that education begins at birth, when impressions

first begin to crowd in on the child. The natural order of education, he believed, was to give the child many experiences with things before he has verbal instruction. This is quite in harmony with present views, as is his emphasis on adapting materials of instruction to the developmental level of the child. Pestalozzi put into practice Rousseau's exhortation to study the child. He found what he believed to be the way in which children learn best, and, although in none of his writings did he formulate his philosophy clearly, his example has markedly influenced educators of young children throughout the world.

Froebel, the "Father of the Kindergarten"

One of those who were strongly influenced by Pestalozzi was the German Friedrich Froebel (1782-1852), who spent several years as a teacher in Pestalozzi's Institute at Yverdon, in Switzerland. It was Froebel who first formulated a comprehensive theory of early childhood education and a detailed method for carrying it out. After some experience in teaching older boys, Froebel concluded that the early years are of great importance and should receive more careful attention. Under Pestalozzi's influence, he became deeply impressed with the value of music and play in the education of young children. His initial attempt to establish a private school in which the play idea, music, and activity motivated by the interest of the children themselves were uppermost failed, but Froebel did not lose his conviction that educational reforms were most needed in the early years of childhood. Several years after his first failure, Froebel started another school for young children in which play, games, songs, and other activities were the dominating characteristics. This second school was a success, and in 1840 Froebel invented the name "Kindergarten" (*children's garden*) to describe the kind of school in which he believed.

From our point of view, Froebel's kindergarten offered a rather formalized type of education, but for its time it was rev-

olutionary. The core of the curriculum was the "gifts" and "occupation" series, by means of which the child was introduced to various creative and constructive activities as well as to the rudiments of counting and measuring.

The "gifts" consisted of various materials used to teach the child the nature of form, number, and measurement. The first "gift" was six soft colored balls; the second included a cube, a cylinder, and a sphere; the third was a number of sections which together formed a cube. By manipulating these materials in prescribed fashion, the child learned to count, combine, divide, make fractions out of wholes, arrange in order, measure, and analyze.

The "occupations" consisted of the essentials for such activities as modeling, drawing, sewing, and coloring. Again the use of materials was prescribed. By following a carefully conceived and formulated plan, the child learned to manipulate clay, cut, string beads, sew, weave, fold paper, make cardboard designs, draw freehand, trace, paste, and so on. A minimum of free play was permitted. The rigidity of Froebel's system goes counter to our modern emphasis on free creativity, but Froebel was the first to attempt to provide activities for the development and growth of children.

Froebel recognized the value of other manual and constructive activities as well. He gave new educational emphasis to finger plays, singing, games, and nature study. Games played with lively songs and rhythms were one of Froebel's great and permanent contributions to early childhood education. Some of his predecessors had encouraged the use of games as an enjoyable pastime, but Froebel was the first to utilize them for their educational value.

Froebel recognized the potential educational benefits of the activities with which a child's day is so largely occupied. He also recognized the relation of the school to the home during the early years and believed that the role of the school was to supplement the home. In Froebel's plan, "doing," "self-activity," and "expres-

sion" were fundamental to the kindergarten technique. Children's self-motivated activity directed toward the development of worthy social and moral values became the dominant idea of the kindergarten.

Recognizing that man is a social animal who lives by co-operating with his fellows, Froebel conceived of education as a social process. Hence, he asserted that co-operation, courtesy, and helpfulness should be prominent features of the education of young children. This emphasis on the social atmosphere of learning has become a marked characteristic of the kindergarten. Today we emphasize co-operative and sharing behavior by helping children learn to take turns, to work with common toys, and to share possessions as well as experiences with others.

The Montessori Schools

In more recent years, the influence of Dr. Maria Montessori (1870-1952) has also been felt in the evolution of the kindergarten. Mme. Montessori, the first woman to receive a medical degree from the University of Rome, became interested in underprivileged and mentally deficient children while an assistant in a psychiatric clinic. In 1907, after several years of work with defective children, she was given the opportunity of opening a school for children of working mothers in connection with a housing-improvement project. Unlike the children with whom she had worked previously, these children were of normal intelligence. Mme. Montessori's school was highly successful, but her later attempts to apply her principles of education to older children failed. However, her influence at the preschool and elementary levels, disseminated through her many books, articles, and lectures in several countries, was great.

One of the most important contributions of this educator was her insistence on the adaptation of school work to the individual child. Good teachers have always been aware of the differences among children, but Mme. Montessori gave them

great emphasis and convinced many teachers of the cardinal importance of these differences in early childhood education.

No less significant a contribution was Mme. Montessori's insistence that both the child and the teacher be free, neither dominating the other. In the Montessori school, the burden of control was on the children, in accordance with her belief that there is no freedom without independence. The teacher's role was that of a guide and an observer. She helped and encouraged children when necessary, but otherwise she left them alone. Mme. Montessori designed materials for instruction such that, in many instances, children were able to find and correct their own mistakes and thus become increasingly independent of the teacher.

Emphasis on the training of the senses was another characteristic of the Montessori method; indeed, it was perhaps the distinguishing mark of her educational principles. The development of the senses during the early years of childhood, Mme. Montessori believed, was of prime importance to the development of intelligence. She did not claim that sense training as it was provided in her schools directly increased the intelligence of the child, but she did believe that it helped him to develop finer discriminations which in turn enabled him to have a greater variety of experiences than he would have had otherwise. Sense training was also useful, she felt, as an introduction to the formal school subjects of reading, writing, and arithmetic.

Much of the teaching material in the Montessori schools did not lend itself to group endeavor. However, practical experience was provided—for example, by giving the children a share in the housekeeping responsibilities—to help them develop independence and learn to work with others toward mutually satisfying goals. Mme. Montessori saw the value of having children participate in the necessary activities of the school. She realized as well that the school through its influence could help to improve the home care of children. Both of these ideas are in harmony with the best educational thought of today. In the modern school, children take on many responsibilities for running the affairs of

the classroom, and parent education is an important part of most early childhood education programs. Mme. Montessori was far in advance of her day in visualizing the school as a social agency and as a means of improving the community.

Unlike her predecessor Froebel, Mme. Montessori failed to appreciate the necessity of play in the education of the child. Many of the materials used for sense training in the Montessori schools were designed for manipulation and handling by the child, but they were by no means play equipment. Little attention was given in these schools to the emotions of the child. What games there were apparently were included only as a concession to the immaturity of the child; little or no instructional use was made of them. Children were not given the opportunity to engage in dramatic play, to sing, to look at pictures, or to play with paints or clay. Yet children enjoy all these activities and can learn a great deal from them. Mme. Montessori failed completely to appreciate their significance.

Since her death in 1952, Mme. Montessori's influence has declined somewhat in the United States. She did, however, blaze the trail of modern educational practices in Europe. Her work in Italy was suppressed by the Fascist regime; she left no organized following among Italian teachers. She was the symbol of modern education in Europe for close to fifty years, but, ironically, her influence has been felt most in the schools of Switzerland, Holland, England, and, after World War II, in India (to which she fled from Italy), rather than in her native country.

John Dewey and Democratic Society

John Dewey (1859-1952), perhaps the most brilliant educational philosopher of our time, was a contemporary of Mme. Montessori. He has become the symbol of modern education in the United States as she has in Europe. The whole field of education has felt the influence of Dewey, and the kindergarten of today is based to a great extent on his principles.

In 1896, Dewey established an elementary school at the University of Chicago, where he was then teaching. This school was intended to be a place where theories and ideas could be demonstrated and tested. Although the children ranged in age from four to twelve or fourteen, they were all taught by kindergarten-primary teachers using modified procedures of the less formalized kindergartens of the day. There was no rigid division into grade levels.

Dewey's own account of the work of his experimental school shows that efforts were made to put into effect some principles which Froebel had set forth decades earlier. Dewey, like Froebel, believed that education should be rooted in the activities of the child, and that these activities should be organized and directed toward effective social living.

According to Dewey, man is a perpetual learner in the sense that he is continually being confronted with new situations. Each new situation requires him to change his previous ways of thinking or behaving. He must constantly revise, reconstruct, reorganize, and this remaking of experience constitutes education. Education, according to this philosophy, begins at birth and proceeds throughout life. Education is not preparation for life but, rather, a process of living.

The child, according to the Dewey philosophy, lives and acts in the present; he sets up aims and readjusts his experiences as he goes along. This continuous enriching of experience by readjusting to the complexities of the environment is at the heart of the educational process. True education proceeds through stimulation of the child's powers by the social situations of which he is a part. Thus the capabilities of the child are both expressed and developed as he comes into contact with others.

Left to himself, the child uses his developing ability only for his own selfish ends. But the continuance of society demands that individuals consider the good of the whole. To accomplish this end, the school is organized for co-operative action. Dewey regarded the school not merely as a place where children go to

accumulate information nor to receive care, but as an institution essential to the continuance of democratic society. In *My Pedagogical Creed*, he asserted that the school is an absolute necessity—to society no less than to the child.

The school should furnish a social environment in which the *ongoing activities of the adult world are carried on in a modified form which can be understood by children*. In this embryonic form of social life, the child should learn through direct, meaningful experience. No modern educator has been more insistent than Dewey on the role of direct, specific experience in learning.

In the latter part of the nineteenth century, the Froebelian doctrine of self-activity—that is, activity engendered by the child's *own interest*—was beginning to have some influence. This, together with the new emphasis on child development, challenged the traditional pedagogical philosophy of the day, which contended that learning which was pleasant and interesting to children would not prepare them to face the harsh realities of adult life. Dewey attempted to clarify the issue by demonstrating that all real effort arises from deep interest in a task, and that this interest cannot be "created" artificially. To Dewey, artificial motivation by teachers and all the learning resulting from it were wrong.

Dewey believed that learning must grow out of the normal activities of the child, that it must be based on what is of genuine interest to him. From Dewey's doctrine concerning interest, a new appreciation for motivation developed and, accompanying it, certain changes in the elementary-school curriculum. In Dewey's conception, education involves "not merely learning, but play, construction, use of tools, contact with nature, expression, and activity; and the school should be a place where children are working rather than listening, learning life by living life, and becoming acquainted with social institutions and industrial process by studying them."¹

¹ Elwood P. Cubberly, *A Brief History of Education*, Boston, Houghton Mifflin, 1922, p. 782.

Thus Dewey clarified the relationship of knowledge and productive activity. Schools incorporating Dewey's ideas were started by the "radicals," as progressive educators were called. They set out "fearlessly to develop methods by which children learned through their own actual experiences, and, as time went on, more and more attention was given to experiences which children seek out and enjoy and less and less to experiences set upon because they are supposed to be proper and valuable for children. The child's own purposes became the pivot of kindergarten activities. The philosophy of experience was thus carried over into practice."²

Other great changes in kindergarten education can be traced to the influence of Dewey's "project method." The project method emphasized the child's right to participate in planning for himself and stressed the importance of children's helping and learning from one another. The socialized kindergarten of today is based to a great extent on Dewey's principles.

The Philosophy of Today's Kindergarten

For the most part, the curriculum of the kindergarten evolved without benefit of the research we now have on the young child and his development. Much of the progress in the educational program for young children was accomplished in the school itself by teachers who were sensitive to the needs of the young. Although wise teachers continue to evolve useful techniques in their own kindergartens, this phase of education is now well grounded in scientific research and is no longer dependent upon philosophical reflections concerning the nature of young children.

As a result of advances in scientific knowledge, educators today realize that action rather than abstract thinking or reflection is the young child's predominant behavior trait. Activity serves the requirements of the child's developing nervous and muscular

² Ilse Forest, *Early Years at School*, New York, McGraw-Hill, 1949, p. 114.

system; learning in the young child appears to be as much a bodily function as a mental process.

The young child needs to explore and learn with all his senses—he needs to touch, to finger soft and hard things; he needs to learn the sound of things, their smell, and how they react when pushed, pulled, hit, or dropped. The keynote of behavior in early childhood is motor activity rather than passive sitting still and listening. The child learns through experiencing. And the well-planned kindergarten program gives the child an opportunity to try his hand at jobs of various kinds—the opportunity to learn by doing. Today we emphasize learning on the part of the child rather than teaching on the part of the adult. The environment of the kindergarten is so arranged that it challenges the learner to explore its possibilities, with the helpful guidance of a teacher sensitive to his needs.

Play also enters into the child's way of learning, for play, we now realize, is one of the most effective means of education. To the young child, play and work are synonymous; he learns as much about his world through one as through the other.

Some advocate an educational program for children which emphasizes preparation for adult living with little reference to present needs. Others believe that education should develop around the child's immediate interests and needs. The latter philosophy is based on the assumption that a child who lives fully and richly at each stage of development is getting the best possible preparation for the future.

In reality, it is difficult to separate the past, the present, and the future in the educational life of the child; the experiences and accomplishments of each developmental stage are related to the past and anticipate the future. If we define education as a process beginning with birth and ending only at death rather than as formal schooling, we must recognize that that education is best which capitalizes to the greatest extent on the nature of the learner. Good education helps the child utilize his present

experiences in such a way that he progresses to an ever higher level of functioning.

The task of the educator is, then, to direct energy rather than to suppress it. The inquisitiveness of the child and his eagerness to participate in what is going on around him become the avenues through which learning takes place. Children are active, inquiring beings who need the challenge afforded by the activities of the school. There is perhaps no reason that children could not successfully be taught all they need to know at home. But many homes are not equipped for this task, nor are most parents able to take on this responsibility. So the social institution we call the school has been set up for the purpose of guiding learning and helping children to grow into the kind of adults needed in our democratic society. And the teacher is the person entrusted with the guidance of this growth.

Growth consists of a series of events governed by laws as inevitable as those that govern the changes of the seasons. The modern developmental point of view and the idea that full, rich living in the present will prepare the individual to live adequately in the future are based on the principles of growth. Today's educator bases his educational philosophy not on complacency or blind confidence in the growth process but, rather, on an understanding of the process and of how best to co-operate with it in guiding the child. Such a philosophy is consistent with democratic ideology, for it asserts that the task of those who teach the young is not to force children into a predetermined pattern, but to guide growth; not to indulge them, but to defer to the limitations of immaturity.

Every society, of course, even a democracy, has certain pre-conceived standards to which it hopes its children will adhere; every educational system tries to help youth to develop into the kind of people needed and desired by the society. But the essence of democratic society is respect for the individual and the contribution he can make to the group. The essence of democratic education, therefore, is to help each child to obtain

his optimal growth in the light of his unique potentialities. The "pattern" into which children are guided in democratic education is, then, a pattern determined by the nature of each child.

The good school for young children is democratic—a place where the child is valued not only as an individual but also as a member of a group. It is an environment in which the child feels secure, and in which there is enough adult control to keep the pattern of living consistent, while at the same time ensuring adequate freedom for the expression of creative impulse. Such an environment sets up a schedule sufficiently firm to provide a reasonable amount of security in daily activity, yet sufficiently flexible to allow for desirable changes of activities to meet new situations and the changing interests of the child. It sets standards which even young children can understand and in the setting of which they participate, but it also allows for modification in terms of individual and group needs.

The modern kindergarten seeks to preserve the eager, inquiring attitude of the young child. Rather than creating a situation in which the teacher instructs and the children listen, today's kindergarten encourages children to learn all they can from their own observations and inquiries. The wise teacher always gives children ample opportunity to comment and to ask questions before she does any instructing. She is concerned with helping children to meet, face, and solve problems at their own level of maturity. Even kindergartners are capable, with encouragement, of formulating a problem and making suggestions for solving it. Learning this skill helps the child to realize the need for thinking about the results of an activity as well as to improve his method of dealing with other problems.

The Influence of the Kindergarten on Education

The influence of the kindergarten has been great, both on the general curriculum of the elementary school and on the whole area of early-childhood education. Education through doing re-

ceived new emphasis from the kindergarten, and the kindergarten's recognition of educational values other than those to be derived from books has been extended gradually into the elementary school. The new approach to the education of the young also has largely eliminated the harsh discipline that at one time was characteristic of many schools.

We have come to recognize the importance of the child's joy in his work. Those interested in the welfare of the young child feel that education fails if the child does not feel this joy. It is a by-product of work and play suited to the child, in which he finds a deep sense of self-satisfaction and accomplishment. It has long been known that the healthy child craves activity which interests him. But only relatively recently has this need been recognized and utilized in the education of the child. Today we start with the child's existing purposes and interests and guide his developing purposes and interests, thus helping the child to use his full learning potentialities. Such an educational program is the most promising means for realizing the potentialities of the child and helping him to control his own behavior.

The preschool and primary grades have shown the greatest progress in the acceptance of constructive educational ideas. Schools are moving toward the understanding that their goal is to enable each child to live a full, rich life at whatever stage of growth he has reached, and to continue that growth intellectually, physically, socially, and emotionally at the optimal rate *for him*. But it is in the kindergarten that this philosophy has been most fully realized. Because the kindergarten has not been concerned with the transmission of subject matter as such, the child and his needs have become the focal point for its educational activities.

Problems for Discussion

1. The schools established by Pestalozzi would appear to us to be very conservative; yet, for his day, Pestalozzi was considered quite

"progressive." What does this term really mean as applied to education? What determines whether a scheme of education is traditional or progressive?

2. Look at some of the portraits of children done in the seventeenth and eighteenth centuries. What important clue can you find in the manner in which children are represented which tells you how children were regarded in these times? ("Blue Boy," by Gainsborough, is a good example.)
3. The advent of Christianity did not seem to improve the lot of children materially. How can you account for this? What factors related to man's view of man help to explain this?
4. From your own experience in elementary school, or from your observations, what influence do you conclude that the "kindergarten philosophy" has had on other areas of public education?
5. According to the philosophy expressed in this chapter, the teacher merely "guides" the growth of children. Are not the demands of our culture so strong that we ought to "mold" children into correct patterns of behavior? Are not these patterns for the young largely predetermined? Explain.

Suggested Additional Reading

History of the Kindergarten Movement in the Western States, Hawaii, and Alaska. Washington, D. C., Association for Childhood Education International, 1940.

Cole, Luella, *A History of Education.* New York, Rinehart & Company, Inc., 1950.

Cubberly, Elwood P., *A Brief History of Education.* Boston, Houghton Mifflin Co., 1922.

Heltibridle, Mary E., "What, No Kindergartens?" *N. E. A. Journal*, January 1957, 224-56.

Knight, Edgar W., *Fifty Years of American Education.* New York, The Ronald Press Company, 1952.

2. *Preschool Education Today*

No educational institution is created by one person alone. Although Froebel gave it its name and much of its philosophy, the kindergarten also had origins in the philosophies of the educators already discussed and many others.

The Kindergarten in the United States

Even Froebel predicted that the kindergarten would find its greatest growth in the United States. True to this prediction, in no other country has the kindergarten spirit been so widely applied to school work, and nowhere has the original kindergarten idea been so expanded and improved. Although this educational plan for young children is found today in some form in nearly all countries of the world, it is in the United States that the ideas of Froebel have been most enthusiastically accepted and put into practice.

The first kindergarten in the United States was founded in 1855 in Watertown, Wisconsin, by Mrs. Carl Shurz, a former pupil of Froebel. Like many of the other kindergartens established during this decade, it was a German-speaking school supported by private funds. During the next decade, some ten more kindergartens were organized in German communities. The first

English-speaking kindergarten was founded by Elizabeth Peabody in Boston in 1860, and through her influence a private training college for kindergarten teachers was opened in that city in 1868. A similar training school was started in New York in 1872 by Marie Boelte. These training schools were also privately supported institutions.

In 1873, in St. Louis, Missouri, the kindergarten was for the first time incorporated into a free public-school system. Dr. William T. Harris was the superintendent of schools at the time and Susan Blow became the first public-school kindergarten teacher. By the end of the nineteenth century, about three hundred kindergartens and ten training schools for kindergarten teachers had been established in about thirty states. Many of these were private institutions, but it was not long before cities began to adopt the kindergarten as part of their public-school systems. Gradually, as public schools began to take on an increasing responsibility for the education of the child under six, privately supported educational enterprises for the young child decreased in importance. Thus a new rung was added at the bottom of the American educational ladder.

Today the word "kindergarten" is "commonly used to designate any school for children between four and six years of age."¹ The nursery school, on the other hand, is defined as a "day school whose program and environment are planned to stimulate learning and development of children too young to go to kindergarten" and to foster the best emotional, social, physical, and mental adjustment of such children.² While the kindergarten has been part of our educational system for more than a hundred years, the nursery school is the creation of the last twenty-five years; only three nursery schools were in existence in the United States in 1920.

¹ *Encyclopedia of Modern Education*, New York, Philosophical Library, 1943, p. 437.

² Virgil E. Herrick and Margaret L. Carroll, "The Educational Program: Early and Middle Childhood," *Review of Educational Research*, April 1953, XXIII, 115-19.

The Population of the Kindergarten

Although kindergartens have been defined above as schools for children "between four and six years of age," there appears to be no uniform method of classifying four-year-olds in the school population. In some states—Wisconsin, for example—a child may enroll in kindergarten at the age of four and remain either for two years or, if he has reached the minimum age for entrance into first grade after a year of kindergarten, for only one. Thus a child entering at four years, six months, must attend kindergarten for two years while a child entering at four years, eight months, may be eligible to enter first grade the following September, depending upon regulations in his district. Unfortunately, there seem to be no available statistics on the enrollment of four-year-olds as a group in public or private centers.

According to the Department of Health, Education, and Welfare, "Legislation over two decades reveals trends toward lowering the minimum school attendance ages. Some states prescribe a minimum school entrance age but authorize local boards of education to establish entrance ages at their discretion." * Thirty-one states, plus the District of Columbia, have provisions for children to enter kindergarten before the age of five. In three states the minimum age is three; in twenty states it is four; in one state it is four and one-half; and in seven states, and the District of Columbia, it is five.

The Bureau of the Census reports that there were 3,544,000 five-year-olds in the total population in October 1955.⁴ Of these children, 42.9 per cent, or 1,521,000, were enrolled in kindergarten. The table shows the distribution of kindergarten attendance among various groups of five-year-olds. In addition to these five-year-olds, the Bureau of the Census reports that there were

* *Status of Kindergartens in the U.S.A.*, rev. ed., Washington, D. C., Office of Education, Department of Health, Education, and Welfare, June 1954, p. 3.

⁴ *Current Population Reports, Series P20, No. 66*, Washington 25, D. C., Bureau of the Census, U. S. Department of Commerce, April 1956.

**Five-Year-Olds in Public and Private Kindergartens:
October 1955***

	TOTAL			PUBLIC SCHOOLS		PRIVATE SCHOOLS	
	Popu- lation	Number	Per cent	Number	Per cent	Number	Per cent
TOTAL	3,544,000	1,521,000	42.9	1,273,000	35.9	248,000	7.0
COLOR:							
White	3,056,000	1,388,000	45.4	1,163,000	38.1	225,000	7.4
Nonwhite	488,000	133,000	27.3	110,000	22.5	23,000	4.7
RESIDENCE:							
Urban	2,072,000	1,162,000	56.1	988,000	47.6	176,000	8.5
Rural							
nonfarm	963,000	294,000	30.5	232,000	24.1	62,000	6.4
Rural farm	509,000	65,000	12.8	55,000	10.8	10,000	2.0

* *Current Population Reports, Series P20, No. 60, Washington 25, D. C., Bureau of the Census, U. S. Department of Commerce, April 1956.*

107,000 six-year-olds, or 3.0 per cent of the children in the six-year-old age group, in kindergarten at the time of the study.

From the table it can be seen that there are more children from urban than from rural areas having the advantage of kindergarten. Also, a higher percentage of white than of nonwhite children attend kindergarten. (It should be noted, perhaps, that few Southern states provide financial support for educational services to children under six.)

Enrollment in kindergarten increased 82 per cent from 1950 to 1955, representing an addition of 700,000 children to the total kindergarten population. The Bureau of the Census attributes about 40 per cent of this growth to an increase in the birth rate; there were about 280,000 more five- and six-year-old children in 1955 than in 1950. Roughly 60 per cent is attributed to an increase

in the percentage of children who begin school in kindergarten. The fact that crowded school conditions have necessitated more stringent rules for admission to first grade and that, therefore, some children who might otherwise have enrolled in first grade may have entered kindergarten instead may also help to explain the increase in kindergarten enrollment in recent years.

State Provisions for Kindergarten Services

In the decade of the 1870's, there were public-school kindergartens in only three cities in the United States. By 1888, however, there were public kindergartens in thirty cities, enrolling 15,145 children. By 1930, nearly 750,000 kindergarten children were part of the public school. During the depression, many school systems, faced with reduced funds, were forced to discontinue kindergarten services. Because the kindergarten was the last of the "regular" education services to be added to the public school system, it was in many instances the first to go when finances became a problem, especially in areas which were receiving no state support for kindergartens. By 1934 enrollment had dropped to 600,000. No big increases were noted until World War II, when the increase in the number of working mothers, among other factors, made the need for an expansion of child-care services apparent. From 1942 to 1945, sixteen states lowered school-admission age to provide for children under the age of six, and thirteen states passed permissive legislation so that nursery schools or kindergartens could be established (four of them for the duration of the war emergency only). In these years, ten states authorized the use of local funds for nursery schools and kindergartens; nine states authorized the use of state funds for emergency care of children from two to fourteen years of age; and thirteen states authorized acceptance of federal funds for specific programs of child care.*

* *Early Childhood Education, Forty-sixth Yearbook*, Chicago, National Society for the Study of Education, University of Chicago Press, 1947, II, 59.

Today kindergarten attendance is not compulsory in any state, but all states except Arkansas have permissive legislation for the establishment of kindergartens. Many of the existing state laws, however, limit the provision of kindergartens to towns or districts of a certain minimum population.

Kindergartens in Rural Areas

In rural areas, kindergartens still seem to be the exception rather than the rule, as the table on page 21 suggests. Houses in rural districts are widely scattered, and the need to transport children long distances to attend a central school has probably deterred their establishment. Further, there is the added difficulty of obtaining financial support for such schools. Many rural areas are unable to support kindergartens without some state or federal funds to supplement the resources of the local community. Some rural areas, where the need is greatest, are totally unable to provide local financial support for adequate programs of education for four- and five-year-olds. In a few rural areas, a six-week kindergarten is provided in the spring for children who will enter first grade the following September. In many communities, five-year-olds are placed in the first grade, where they probably account to some extent for the higher percentage of failures in first grade that rural areas seem to have.

Schools for Handicapped Children *

In addition to providing publicly supported educational facilities for normal young children, since 1952 many states have made efforts to provide kindergartens for handicapped children—

* Data on the provisions for education of handicapped children presented throughout this chapter are taken from Office of Education, U. S. Department of Health, Education, and Welfare, Reprint from "A Report on State School Law; Special Education of Exceptional Children," *School Life*, November 1956.

that is, those who cannot be effectively educated in regular classrooms. Recognizing the need to identify these children early, most states either specify an early age for admission or make no age requirements. Of the forty-one states that provide special kindergarten facilities for the physically handicapped, eight specify a minimum age of three years, one specifies four years, four specify five years, fifteen specify six years (or "school age"), and thirteen have established no minimum age. Six of the thirty-nine states with special facilities for the mentally handicapped admit children at three years of age, one specifies four years, seven specify five years, sixteen specify six years (or "school age"), and nine have established no minimum.

Most states define "physically handicapped" broadly, to include all children whose physical condition is such that they require special instruction. Among the mentally handicapped, however, a distinction is usually made between children who are "educable" and those who are "trainable." Although this distinction may be made on the basis of mental age, there is an increasing tendency to determine the child's educability on the basis of his response to learning situations and to his social environment. In other words, a child who in terms of mental age as measured on a test appears to be seriously retarded may be classed as "educable" if he gets along with his peers and seems to be making some headway in the learning situation.

All but two states provide financial assistance for the education of these children, some providing for unspecified allotments, to be determined by local schools, and others for costs over and above that necessary for regular pupils. Two states pay the entire cost of special classes, and many states contribute funds for the transportation and other expenses involved in educating handicapped children in districts other than their own if no local facilities for their education are available. There appears to be a trend away from making it mandatory for districts to provide for handicapped children. Since 1949, most

legislation has been permissive, leaving the decision up to the local district.

Teaching Young Children as a Profession

It is only recently that the teaching of young children has been considered a profession. For too long a sentimental regard for young children was considered a more important qualification than education. Today forty-one states require certification of teachers in publicly supported kindergartens and seventeen require certification for nursery-school teachers as well. The policy regarding private schools has generally been for states to exercise a minimum of control. Usually teachers are not required to hold state certificates unless the school seeks accreditation by the state education agency.¹

Most schools now have special requirements for teachers of handicapped children, and many are now authorizing special educational programs and scholarships for teachers of these children. Nearly all states provide supervision at the state level for special education programs.

The Function of the Modern Kindergarten

The modern kindergarten is designed essentially to supplement the home; there is little in it, perhaps, that could not be supplied in the home if parents were in a position to do so. But increased urbanization in the past century has brought about many changes in the structure of the family and in the nature of family life. Families are smaller today, and many members are apt to be working or otherwise engaged outside the home during the day. Few children have parents or other older persons in the immediate home environment with adequate time to devote

¹ *A Manual on Certification Requirements for School Personnel in the United States*, prepared by W. Earl Armstrong and T. M. Stinnet, Washington, D. C., National Commission on Teacher Education and Professional Standards, National Education Association, pp. 8-10.

to their education. The child living in a city apartment is handicapped by lack of space in which to play and by lack of contact with other children. In fact, the city child very often is as isolated as the rural child. In some homes parents may be in a position to provide the things young children need in order to grow mentally, emotionally, physically, and socially—adequate food and rest, companionship, play space, and play materials. But there are many other homes, in all sections of the country, at every economic and social level, in rural and urban areas alike, in which parents are unable, because of circumstances, ignorance, or lack of training, to give children these necessities for full development. In a democratic society such as ours, all children should have an opportunity for the best possible growth. Organized educational services for young children are an attempt to supply this opportunity, now that family life, generally, is no longer able to do so.

The objectives of education for young children have been stated in many ways. According to Gans, Stendler, and Almy,⁸ the major purpose of education at the kindergarten and primary level is "to meet the interests and needs of the pupil." Sherer⁹ believes that the school for young children should be a planned educative environment which provides experiences and guidance for each child in harmony with his potentialities and needs—experiences that will enable him to participate as intelligently as possible in important human activities, help him to develop values and patterns of behavior appropriate to the democratic way of life, and yield him personal satisfaction in being with his fellows.

The National Education Association¹⁰ asserts that the func-

⁸ Roma Gans, Celia Stendler, and Millicent Almy, *Teaching Young Children*, New York, World Book, 1952, p. 85.

⁹ Lorraine Sherer, *Their First Years in School*, Los Angeles, M. Miller, 1939, p. 24.

¹⁰ *For Your Information*, Bulletin, Washington, D. C., National Education Association, July 1952, p. 2.

tion of education in the kindergarten is a broad one. Some of the more important goals are to help promote the health and safety of children, to accustom children to working in groups as well as alone, with or without the distraction of others, and to provide children with broad opportunity for contacts with other children and with adults. In addition, the kindergarten should offer a variety of experiences which will help to reveal the interests and aptitudes of children and to prepare them for the reading, writing, and number work they will encounter in first grade.

In the United States, as we have pointed out, the kindergarten has played a leading role in developing new theories of childhood education. During the past fifty years—the period which saw the evolution of progressive theory and practice in education—the kindergarten has grown from a little-understood institution to one which is scientifically grounded in research. The modern kindergarten is “progressive” to the extent that it applies the findings of modern biological and psychological science to the education of children so that they can more effectively develop their potentialities as individuals and as responsible members of our society.

In spite of the educational lead which on the whole the area of early childhood education enjoys, even in the kindergarten some highly formalized procedures still persist which are difficult to justify in the light of what we know about the young child. As Gans, Stendler, and Almy point out, the type of curriculum commonly called the “3-R’s approach” still prevails in some primary grades, and in some instances has reached down as far as the five-year-old kindergarten. “Counting, some writing, and reading readiness activities, chiefly in the form of workbook exercises, have been typical experiences in kindergartens where this curriculum has been in operation. Under such a setup the kindergarten is seen as a year of settling down for children, of adjusting to sitting still and following directions, so that they

will be better prepared for a more rigorous attack on the 3-R's during the first grade."¹¹

There are those who would defend this approach to education in the kindergarten in terms of what is expected of children in the first grade. There are others, however, who feel that the kindergarten can make a much greater contribution to the adjustment of children to the first-grade reading program by helping them to acquire a rich fund of meanings through broad experiences, to develop the ability to speak easily and fluently and to think independently, to develop desirable social habits and ways of working with others, and to develop an active interest in reading. The Association for Childhood Education International¹² supports this thesis, stating that the aim of the kindergarten should be to help four- and five-year-olds to "live richly" in the present rather than to prepare them to read in the first grade.

The Values of Kindergarten Experience

Because education in the United States is administered, controlled, and to some extent supported, locally, there will continue to be differing philosophies regarding the function of any particular segment of the school. But most people who have worked with and understand the psychology of very young children feel that kindergarten experience has many values for all children. We no longer consider education to be merely a matter of "pouring" learning into the child. Rather, it is today conceived to be a "reconstruction of experience," to use Dewey's terminology. In other words, every moment of his life the child is learning something and adapting what he learns to the solution of new and increasingly difficult problems. With this philosophy to guide our thinking, we are increasingly recognizing

¹¹ Gans, Stendler, and Ahry, *op. cit.*, p. 81.

¹² *Knowing When Children Are Ready to Learn*, Washington, D. C., Association for Childhood Education International, 1947, p. 6.

the many values of kindergarten experience. Because there are no formal requirements of subject matter to be learned, the kindergarten can give the child maximum freedom to explore and to grow. The kindergarten cuts through many fields of subject matter, vertically as well as horizontally, taking from each area what will further the growth and development of the child.¹³

Although many—perhaps most—of the values of kindergarten attendance are rather intangible, attempts have been made to measure some aspects of growth resulting from early educational experience. Goodykoontz and others¹⁴ report that children who had had school experiences at an early age were more advanced in motor coordination, social responsibility, and health habits and demonstrated greater adaptability to new situations than children whose school experience began with first grade. The findings of Van Alstyne and Hattwick¹⁵ are in substantial agreement with those of Goodykoontz. In a study concerned with the behavior of nursery-school children, these two experimenters found that "the nursery school makes for social adaptability, independence, self-assertiveness, self-reliance, and interest in environment." They also found, significantly, that the nursery school contributes to emotional adjustment and leadership. Jersild¹⁶ reports that, although evidence is rather meager, "quantitative findings" indicate that nursery schools tend to accomplish the rare achievement of promoting the child's sociability and at the same time fostering his individuality and independence.

¹³ Roy D. Willey, *Guidance in Elementary Education*, New York, Harper, 1952, p. 64.

¹⁴ Bess Goodykoontz et al., in *Early Childhood Education*, op. cit., pp. 44-69.

¹⁵ Dorothy Van Alstyne and La Berta Hattwick, "Behavior Patterns of Children with Nursery School Experience," in Raymond Kuhlen and George Thompson, ed., *Psychological Studies of Human Development*, New York, Appleton-Century-Crofts, 1952, pp. 411-25.

¹⁶ Arthur T. Jersild and Mary Fite, in Wayne Dennis, ed., *Readings in Child Development*, New York, Prentice-Hall, 1951, p. 568.

The Effect of Kindergarten Experience on I.Q.

A good deal of research has been directed to the question of whether or not early school experience has the effect of raising the intelligence quotient of children. To date, no definitive answer has been reached. Peterson¹⁷ reports that he found an average difference of 3.5 I.Q. points between two groups of children entering the elementary school of the University of Iowa. The higher quotient was achieved by the group which had had preschool experience. However, by the end of the year the difference had disappeared. Wellman¹⁸ reports even more striking findings. She claims that six months of all-day attendance at the preschool of the University of Iowa raised the I.Q. of children an average of 10.5 points, and that the I.Q. of children who attended the same school half-time for a similar period was raised an average of 4.7 points.

Starkweather and Roberts¹⁹ also found evidence that children attending nursery school "gain in I.Q. and percentile rank as measured by Stanford-Binet and Merrill-Palmer retests." In contradiction to Peterson's findings, they found, further, that the gains were maintained following withdrawal from the preschool, as indicated on retests.

Anderson,²⁰ on the other hand, reports contrary findings. He studied two groups of children, matched as to I.Q., age (five years), sex, socioeconomic status of parents, and average of parents' years of education. One group was sent to nursery school and the other was not. Retests of the two groups showed that nursery-school attendance had produced no significant change in the intelligence quotients of the children; the groups were

¹⁷ Harvey A. Peterson, Stanley S. Marzolf, and Nancy Bagley, *Educational Psychology*, New York, Macmillan, 1948, p. 510.

¹⁸ Beth Wellman, quoted in *ibid.*, p. 508.

¹⁹ E. Starkweather and K. Roberts, *Intelligence: Its Nature and Nurture*, *Thirty-ninth Yearbook*, Bloomington, Ill., National Society for the Study of Education, Public Schools Pub. Co., 1940, II, 315-35.

²⁰ D. Anderson, quoted in Peterson, Marzolf, and Bagley, *op. cit.*, p. 508. Also *Intelligence: Its Nature and Nurture*, *op. cit.*, II, 3-10.

still matched in I.Q. In agreement with these findings are those of Kawin and Hoefler,²¹ who report a gain of eleven months of mental age in seven months for each of two groups, one of which attended nursery school for the seven-month period and one of which did not attend at all. (The gain, of course, may be at least partly attributed to the effect of practice, since the same test was given before and after the experience.)

Goodenough and Maurer²² state that none of the analyses they have been able to make warrant the conclusion that attendance at a full-day nursery school has any measurable effect on children's mental development. If reports of improvement of intelligence after nursery-school attendance are valid, they say, "the source of improvement must reside in more subtle factors that as yet have eluded our detection."

Bird²³ found that the effect of a year of training in a superior school environment appeared to be negligible. "Children from superior homes were found superior to those from poor homes at the time of entrance and this difference was maintained." That is to say, there appeared to be no change in I.Q. in the group because of the school experience. Dull children were not made bright as the result of it, and the bright children, who were ahead at the beginning of the school year, kept their lead.

Whether or not preschool attendance has the effect of raising the intelligence quotient cannot be determined at this time. It should be noted that future experimenters looking into this question must pay very close attention to detail and must control all variables meticulously.

If it is true, as Peterson, Wellman, and others claim, that nursery-school experience does effect an improvement in I.Q. scores, it may be that the improved scores reflect a greater un-

²¹ E. Kawin and C. Hoefler, *A Comparative Study of a Nursery School Versus a Non-Nursery School Group*, Chicago, University of Chicago Press, 1931.

²² *Intelligence: Its Nature and Nurture*, op. cit., p. 178

²³ *Ibid.*, p. 84.

derstanding of language rather than a change in intelligence level. Most tests used to measure I.Q. in these instances are verbal, and some evidence indicates that children become more facile with language in a nursery-school situation.

Dawe made a study of the effect of specific training upon language development and related mental functions of children in the preschool and kindergarten of the Iowa Soldiers' Home.²⁴ Her method was to give the experimental group an educational program stressing some of the factors known to be related to superior language development, and to compare the performances of the experimental and the control group on initial and final measures of language ability and other mental functions. The language training was "analogous to what goes on in the home and school life of any child who is not neglected" and emphasized understanding of words and concepts, looking at and discussing pictures, listening to poems and stories, and going on short excursions. The experimenter also attempted to stimulate curiosity, to help the children think critically and notice relationships, causes, and effects, and to eliminate careless thinking and the careless use of language symbols. Dawe found that children in the experimental group made significantly greater gains than those in the control group, achieving superior scores on tests of vocabulary, home-living information, and general-science information. The experimental group, Dawe reports, also gained significantly in I.Q., while the main change for the control group was a loss of 2.0 I.Q. points. Children in the experimental group were also "significantly superior" in reading-readiness tests. (The greater language facility developed in the experimental group probably accounts for the superiority of these children in I.Q. on intelligence tests having a high percentage of verbal items. They did not measure above the control group on a performance test.)

²⁴ Helen Dawe, "Environmental Influences on Language Growth," in Kuhlen and Thompson, *op. cit.*, pp. 239-44.

Other Values of Kindergarten Attendance

In a study to ascertain the value of excursions to kindergarten children as a means of preparing them for reading in the first grade, Cantor²⁵ administered "scientific tests" in the primary year. She concluded that the children definitely profited from the comprehensive program of kindergarten excursions.

Jersild,²⁶ studying the effect of preschool training on vocal ability, found that *early training may enable a child to sing tones "quite beyond his accustomed range."* He suggests, further, that this early training may give the child a lasting advantage over other children with like original endowment whose training begins at a later date.

According to Strang,²⁷ attending kindergarten "seems to give children an advantage in reading readiness and in first-grade reading achievement." English²⁸ puts the point more strongly: "There seems to be no doubt that attendance in a preschool helps the child off to a good start in the primary grades." He points out, however, that the maintenance of this advantage is dependent on the kind of educational program the child is subjected to in the elementary school.

From the foregoing, it can be seen that there is no consensus as to the benefits of preschool education for the child's later achievement. There appears to be widespread agreement, however, that the kindergarten does make some contribution to the child's general adjustment—and this, after all, is one of the most important objectives of the kindergarten. It was Froebel who first directed attention to the social values inherent in the kindergarten grouping, and these values have continued to be stressed. They are, however, rather difficult to measure. Far too often, studies have emphasized the appraisal of effectiveness in formal

²⁵ *Readiness for Reading and Related Language Arts*, Committee of the National Conference on Research in English, 1950, p. 23.

²⁶ Arthur T. Jersild, in Dennis, *op. cit.*, p. 234.

²⁷ Ruth Strang, *An Introduction to Child Study*, New York, Macmillan, 1951, p. 369.

²⁸ Horace English, *Child Psychology*, New York, Holt, 1951, p. 344.

school work, to which the contribution of the nursery school and kindergarten is minor. Much too seldom has the value of kindergarten been examined in terms of the child's general adjustment, social relations, personal development, and zest and enthusiasm for living—the areas emphasized in early childhood education.

Problems for Discussion

1. A recent newspaper "letter to the editor" stated that because of the shortage of teachers and classrooms, kindergartens should be eliminated as part of the free public-education system. Do you agree that this would be a good way of meeting the crisis existing in our schools? Defend your answer.
2. Why is there so much variation as to aims and objectives in kindergarten teaching? Is this a good thing? Discuss.
3. Some say that kindergarten attendance has tangible and measurable values. Others claim that the values are somewhat difficult to measure. Others assert that the values depend on the kind of experience the kindergarten offers rather than merely on attendance or nonattendance. With which of these views do you agree? Why?
4. How do you account for the fact that the area of early childhood education has taken the lead in introducing new educational practices?
5. Assume that you are the kind of kindergarten teacher whose goal is to send on to first grade children who have "settled down." What reasons would you give for favoring a three-R's approach to kindergarten teaching?
6. Assume that you are a teacher who wishes to help children to "live fully and richly" in the kindergarten. How would your approach differ from that of the teacher described above? How would your program differ?
7. Which of the two positions described above do you favor? Why? What points would you stress in trying to convince a parent that your approach is in his child's best interest?
8. How do you account for the conflicting results of studies having to do with the values of nursery-school attendance?

9. How would you define "progressive education" as applied to the kindergarten? Is this the usual definition of the term? Explain.

Suggested Additional Reading

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3. The Child-Development Point of View

I met a little Elf man once,
Down where the lilies blow,
I asked him why he was so small,
And why he did not grow.

He slightly frowned, and with his eye
He looked me through and through—
"I'm just as big for me," said he,
"As you are big for you!"¹

Since the beginnings of formal education for young children, theorists have differed—at times with some bitterness—about the purpose of such education. At one extreme are those who hold that the purpose of all education, whatever the age of the child, is preparation for adult living, with little or no reference to present needs. At the other extreme are those who believe that education should develop about the child's immediate needs and interests, irrespective of future demands or responsibilities.²

There is a third view, one which is gaining acceptance among educators. This position is based on the realization that children are people in their own right, not just incomplete adults. It

¹ John K. Bangs, in May Hill Arbuthnot, ed., *Time for Poetry*, New York, Scott, Foresman, 1952, p. 133.

² *Early Childhood Education*, Forty-sixth Yearbook, Chicago, National Society for the Study of Education, University of Chicago Press, 1947, II, 71.

never loses sight of the fact that maturity is the goal toward which the child is advancing, but it recognizes that the child needs acceptance as a person at each developmental stage. It takes account of the fact that the child's needs, desires, and interests are not identical to those of adults—and that these needs, desires, and interests change as the child grows.

This philosophy obviously requires that the adult understand the growth process in order to know how best to meet the needs of the growing child. Teachers and parents adhering to this view have become more permissive, more and more willing to accept the fact that children feel and behave like children. While guiding them into improved behavior, they are always aware that children are immature and therefore act like immature beings. We have chosen to call this philosophy the "child-development point of view."

Perhaps we can best understand the modern, developmental philosophy by taking a closer look at the two extremes mentioned above. These have been called, respectively, the authoritarian, or absolutist, philosophy and the laissez-faire philosophy. Although it might be difficult to find either of these philosophies today in pure form, aspects of authoritarianism and of laissez faire still linger in many classrooms, as Gesell and Ilg point out.²

The Authoritarian Point of View

Adherents of an authoritarian philosophy of child-rearing believe that the adults of any society or cultural group know what is best for its children, that they alone should determine what children learn. Teachers and parents holding this view attempt to "mold" children into the patterns of behavior and thought that they feel are "correct."

Certainly one of the prime functions of education is to hand on to youth the cultural heritage of the group. But the authori-

² Arnold Gesell and Frances Ilg, *Infant and Child in the Culture of Today*, New York, Harper, 1943.

tarian philosophy goes beyond this. It seems to regard children as little more than habit-forming creatures who can be shaped to any desired pattern. The most effective teaching method, according to this set of beliefs, is that which places the greatest emphasis on repetition. The authoritarian believes that this is the most effective way of perfecting the habits which he has decided are the "right" ones for children to develop. Children reared according to this philosophy do much rote learning. They take little active part in the learning process and they do little real thinking or problem solving. Teachers and parents who are authoritarian in their outlook prefer timid, docile children, children who are, above all else, "obedient."

The authoritarian philosophy, further, lays great stress on discipline imposed on the child from without. Because it believes in absolute standards of right and wrong, regardless of the age or developmental level of the child, it punishes deviations. And yet, as Gesell⁴ points out:

Nothing can be more misleading than an absolute, particularly in the management of children. Absolutism leads to authoritarianism and this in turn to blindness—a blindness toward the developmental status and the developmental needs of a child. From an "absolute" standpoint "stealing" is always *stealing*, but even a crude use of a simple gradient of acquisitive behavior will indicate that there is a difference between the "pilfering" of a seven-year-old and a specific "theft" of a ten-year-old.

If we take a closer look at the assumptions of the absolutist philosophy regarding the way children grow and learn, we see that it is out of harmony with our pattern of social living and with the values we hold to be important. In a democracy such as ours, the goal of teaching must be to help children become capable of thinking for themselves and of directing their own behavior. Our democratic society would not long exist with adults who are only "obedient." Such an idea is consistent with a totalitarian form of government rather than with a democracy.

⁴ Arnold Gesell, *The Child from Five to Ten*, New York, Harper, 1946, p. 30.

It is the approach of dictators—whether they are leading a nation or a classroom. It is the philosophy of adults who use force rather than reason in handling children.

This viewpoint fails to recognize that education is a social process, dependent upon the interaction of the learner with others, and that in this process the learner plays the most important role. The authoritarian adult seems to have forgotten the old adage that you can lead a horse to water but you can't make him drink.

The Laissez-Faire Philosophy

"Laissez faire" is a term borrowed from the French. Freely translated, it means "to leave alone," to let things work out by themselves. If we apply this philosophy to education, we place no constraints on the child. Adherents of this view believe that, if the child is allowed complete freedom, he will eventually arrive at wholesome maturity. This philosophy assumes that the child knows what is good for him and that he will, therefore, select from his environment what is best for him to experience and to learn.

The laissez-faire philosophy is a policy of noninterference; it makes few demands for intelligent guidance on the part of parents or teachers. The laissez-faire adult seems satisfied to sit back and watch children grow, with the firm conviction that they will naturally and automatically become well-adjusted people. Such parents and teachers lay much stress on the democratic value of "freedom" in the life of the child. They fail, however, to make a distinction between freedom and license. There is a significant difference between the two terms. Freedom permits one to follow his own inclinations, but only to the extent that he does not interfere with the freedom of others. License, on the other hand, permits one to do what he pleases when and where he pleases, regardless of the effect on others.

The child of the laissez-faire parent is usually not wel-

comed by others as a visitor because he has never been restrained from any act, whether or not it is destructive. The parents of such a child apparently believe that in time he will understand the reason for acceptable behavior. The parents, meanwhile, do nothing to help him come to understand it. The laissez-faire teacher uses a similar approach. Her classroom is always in noisy confusion. Each child is allowed "complete freedom," with all the consequences that this entails in group living. The teacher gives no guidance, believing that her function is to offer help only when asked. A criticism of this philosophy is suggested by the story of the child who asks the teacher, "Do we have to do what we want to do today?" The laissez-faire approach ignores the fact that children need guidance from adults, and, indeed, actively seek it.

The Child-Development Point of View

The developmental point of view, in temper and in principle, lies between the authoritarian and laissez-faire philosophies. Adults adhering to this view believe that each child is a unique being, with his own rate of growth and his own personality pattern. Teachers and parents holding to this philosophy are, therefore, suspicious of "absolutes" where children are concerned. They do not, however, favor license. Rather, they are sensitive to the relationship of growth to maturity, taking their point of departure from the child's nature and needs. They realize that effective guidance of children "demands an active use of intelligence to understand the laws and the mechanisms of the growth process."⁶

The "Normal" Child

Through much study of children and their patterns of growth, we have developed some concepts of the "average" or

⁶ Gesell and Ilg, *op. cit.*, p. 289.

"normal" child of each age. We know, for example, that the "average" infant cuts *his first tooth* at the age of six months and that the "normal" nine-year-old *likes group games*. Unfortunately, these "norms" have often been misused in working with children. Parents and teachers who adhere to the developmental point of view regard them only as signposts along the road to maturity—as guides which help adults to determine the *direction of growth*, not as whipping posts at which we beat the child into being what the averages for his age indicate he ought to be. The wise parent realizes that many children cut their first tooth later than the age of six months—or earlier. The intelligent teacher understands that not all nine-year-olds are interested in group games, no matter what the "average" does. She knows that a *child who deviates from the average in this or any other way is not necessarily abnormal*, because the norms established for any characteristic or growth pattern represent a "normal range" rather than a precise point. It may, therefore, be perfectly "normal" for a child to learn to walk at sixteen months or twelve months of age instead of at the average of fourteen months. Likewise, it may be "normal" for a child to read at the age of five instead of at the generally accepted age of six and a half.

Principles of Growth

The child-development philosophy also takes into consideration the fact that all kinds of growth—physical, intellectual, social, and emotional—do not occur in sharply defined stages or "periods." Development is by definition always forward to maturity, but there are no abrupt breaks from one developmental stage to the next. Rather, development is a continuum, a gradual transition from one developmental period to another, with considerable overlapping from one growth phase to the next. Nor does development occur at the same rate for all children. Seven-year-olds, for example, differ in many characteristics from five-

year-olds; yet a given five-year-old may have an intelligence level equal to that of the "average" seven-year-old. Conversely, a given seven-year-old may exhibit no more social understanding than the typical five-year-old. Nor are children—or adults either, for that matter—equally mature in all areas at a given time. Research and observation show that children exhibit every conceivable combination and variation in their growth patterns. Some grow faster physically and intellectually; others mature more rapidly socially and emotionally. The pattern differs with each child.

In addition, growth is cumulative; what happens at each stage of development influences what follows. This principle is obvious as applied to physical development, but it is no less true that emotional experiences, good and bad, leave a residue which affects the individual's pattern of feeling and behavior in stages to follow. If the child at four has a severe illness, his physical growth pattern toward "five-year-oldness" may be affected. If the kindergarten child experiences nothing but failure in his initial school experience, he will arrive in the first grade with an emotional handicap to success in first-grade activities. And this handicap may affect his entire school career.

Clearly then, it is difficult to describe the "average" child at any age level. Each child has his own rate of development and pattern of growth. He is the product of his own environment and particular set of experiences. Possibly the only thing common to all children entering kindergarten is the number of years they have lived—that is, their chronological age—and even this varies to a certain extent.

Adults who concern themselves with the welfare of children realize that the many biological, social, and psychological factors affecting behavior make it unrealistic to place great value on "average" behavior. Though it is possible, by comparing age groups, to single out some distinguishing behavioral characteristics and developmental trends, the growth patterns of the individual child, provided that his environment is adequate, may

be "right" for him regardless of the norm for his age group. It cannot be overemphasized that the child is his own norm.

The developmental point of view asserts that a child who is functioning at the highest level of which he is capable is developing satisfactorily. This means "functioning" in every area of growth—physical, social, emotional, and intellectual. A child so functioning is a successful child, whether or not he is achieving as much as other members of his age or grade group. Each child's performance should be measured only in terms of his own past accomplishments. It should not be measured by the yardstick applied to the child of the same age who lives next door or sits next to him at school. The little verse at the beginning of this chapter carries this idea. John, who is five years old and weighs thirty-five pounds, is quite as big for John as Jim, who is also five but weighs fifty pounds, is big for Jim.

Although all kinds of growth do not proceed at the same rate in all children, or even in the same child, there is an observable sequence of developmental stages, dependent one upon another, through which all children pass. The child becomes ready for further development by living richly and fully at each stage.

Children, like all other organisms, have a tendency to grow—to realize their potentialities—rather than to regress. In an environment adequate to his needs, the child is not likely to fall below an earlier level of development. He becomes socially more adept as he grows older; he does not become less so. He does not decrease in size with the years. To nurture the child's strong impulse to grow, we need provide no more than adequate guidance and a favorable environment.

Guidance

According to the developmental point of view, the teacher has a great deal of responsibility. In order to help the child grow at the maximum rate of which he is capable, the teacher needs

to know and understand the growth process. Neither the laissez-faire nor the authoritarian philosophy stresses the need for understanding the growth process. In the former, the teacher sits and waits for development to take place; in the latter, she attempts to mold the child into the desired pattern. In the child-development point of view, on the other hand, the teacher neither passively anticipates nor actively tries to force development; rather, she is ready at all times to help the child climb to the next rung on the ladder to maturity. She does not push him there; she helps and guides the child when he himself is ready to take the next step.

This philosophy recognizes that hereditary and environmental forces help determine the unique growth pattern of each individual child. It views learning in terms of growth and teaching as an effort to help the child to live fully at each stage of development while at the same time helping him to learn those things which the culture wishes to hand on to the rising generation.

The developmental point of view does not advocate unrestrained freedom as the laissez-faire philosophy does. It recognizes the relation of growth to maturity. Although it asks from the child at each developmental level the best performance of which he is capable, it also recognizes that on occasion he may regress to an earlier level of behavior. Growth is always progressive, but occasional regressions, unless they become excessive, in no way indicate a reversal of this trend.

Learning to help oneself is an important aspect of the kindergarten program. Many parents do too many things for their children and so rob them of opportunities for developing self-confidence. Kindergarten teachers can do much to help parents understand that children need to do things for themselves, even though at times what they are trying to do may seem a little beyond their ability, and that they must be permitted to experience the joy of a job that is well done—by their own standards. Many teachers as well as parents need to be

reminded that the child's accomplishments must be measured by his own standards rather than by those of adults. Even young children are capable of making their own beds and experiencing satisfaction with the result; often, however, mothers fail to realize that lumps and wrinkles are not so important to children as they are to adults and that the child will find the job difficult and frustrating if absolute perfection is demanded.

The Environment of Learning

Given the unique nature of each child, if he is to develop his potentialities fully, he must be provided with a learning environment which permits great breadth of experience and gives innumerable opportunities for exploration. The educational program must be appropriate to the developmental level of the child and adapted to his nature and needs. For the young child it must not be inflexible, too highly organized, or too demanding or constraining.

The developmental point of view recognizes that the child is constantly changing and responsive rather than fixed in his behavior patterns. It accepts children as the volatile individuals they are—beings who swing from "glad" to "sad" quickly, who are glad or sad all over. The child responds with his whole body; he does not confine the expression of emotion to a few facial muscles, as do adults. The child-development point of view realizes that young children have a short attention and memory span and that they are incapable of working for remote goals; it recognizes that they are concerned largely with themselves and the "here and now." Only with increasing maturity can they develop concepts and understandings beyond their immediate wants and needs.

Despite precautions, children continue to be exposed to disease, and accidents continue to happen; it is impossible to set up an "ideal" environment for children. Indeed, it is questionable

whether we would wish to set up such an environment even if we could do so, for children need to experience all aspects of living. But, given reasonably good surroundings and opportunities to learn, children make their own next needs apparent and take their own next steps in growth. Teachers and parents must know how children grow and develop, so that they will not expect too much or too little of children at any stage of development.

The environment of learning should facilitate not only the child's intellectual growth, but his emotional, social, and physical growth as well. The school deals with the "whole child," for the child reacts to his environment as a complete and indivisible being. It is impossible to understand the child as a physical being unless we also understand him as a being who thinks and has feelings. Conversely, it is futile to consider the child as a learning organism responding to guidance and teaching if he has unmet physical-growth needs that prevent him from using his intellectual abilities to the maximum. The child is not an organism that can be dissected into component parts for the purpose of education.

If the child is to attain the maximum in wholesome growth, all aspects of his development must be considered. Not only his need for adequate physical care but certain other basic needs must be satisfied, including the need for acceptance, security, and affection. Every child needs to feel that he has a place in the group; he must have satisfactory social relationships; he must come to know the experience of success in worth-while activity. The urge to avoid failure is a powerful one; only after a child has achieved some measure of success can he view unemotionally a situation which challenges mastery.

Not only does the child need to experience success, but he needs to have that success recognized by others, for the attention given to him and to his efforts is a stimulation to further effort. Many emotional and behavioral problems could be avoided if adults would make wise use of approval, recognizing as well

done work that represents the child's best effort. Children, like adults, strive to maintain their prestige. When status is endangered, undesirable behavior may result. Such a reaction can easily be prevented by praise judiciously bestowed.

Every day every child ought to experience the stimulation of real success, appropriately acknowledged by the teacher. "Success" need be no more than having remembered to water plants or perform some other small chore at the teacher's request. This is not to say that children need not learn to experience failure, because that is an important learning too. But failure is met easily if one also experiences success often. There is a tonic effect about success which affects the whole personality. Children respond well to the praise of adults and are humiliated by punishment. The atmosphere most stimulating to growth and learning is one of ease and security. A reassuring pat on the shoulder, a kind word, or a bit of praise by teachers and parents can go far in helping the child to achieve and profit from success and to adjust to occasional failure.

Not all children, however, need the same amount of approval and attention. There are children in every group who appear to wilt unless they receive constant assurances of approval from the adults in their environment. Others, perhaps with greater inner resources, seem to need hardly any reassurance. The understanding teacher bestows approval to each according to his needs, knowing that individual differences are as significant in this area as in areas more readily measurable, such as height, weight, or intellectual ability.

Every child—especially the young child—needs an atmosphere of reasonable security in which he knows that he is wanted and needed. A school with a homelike atmosphere is more likely to contribute to a child's feeling of security and belonging than one which is greatly different from home. The understanding teacher always notices a child's new dress or suit, takes the time to give him special greeting after an absence, remembers to make some mention of a birthday. She lets him know that

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he is a valued member of the group just because he is himself, whether he contributes a great deal or very little. Although a great many children come to school for the first time eager for the new experience, many others would prefer to remain in the familiar refuge of home rather than take this new step. These, perhaps, are the children who need that extra measure of recognition from adults.

In order to give the entering kindergartner a sense of security, parents and teachers should work together to make the transition from the small intimate family group to the more impersonal one of the school as smooth and pleasant as possible. Some schools invite prospective kindergartners to visit a class accompanied by one or both parents. The presence of a familiar person in this unfamiliar experience may make the child feel freer to explore and sample what the kindergarten has to offer. Such a visit may help to cushion the traditional step from home to school.

Once the child becomes a part of the kindergarten group, his confidence and security are increased by the stability of the environment in terms of the adults who are teaching him and the routine of the kindergarten day. A certain amount of routine upon which he can depend provides the necessary base from which the child can move into the unexpected and the new. The establishment of some stable and consistent patterns which the child can recognize not only provides security but also enables the child to give full attention to new experiences as he faces them, without the confusion of not knowing what his responsibilities are at the moment.

Problems for Discussion

1. In what sense is education a "social process"? Does this definition run counter to some classroom situations you have seen? How?
2. Pamela is unusually small for a five-year-old; she is shorter and weighs less than the "norms" for her age group. How can you

explain the fact that the pediatrician who cares for this child says that she is normal?

3. Give examples of the laissez-faire, authoritarian, and developmental points of view from your own school experience. As a child in school, did you experience greater permissiveness in the early grades or in high school? Is this as it should be?
4. The parents in your PTA group see little need to study growth sequences because, they say, "Whatever you do, children grow." How would you convince these parents of their need to know how children grow?
5. Explain the concept that growth is a continuum with no sharp breaks between developmental periods by describing aspects of your own development.
6. If there is no average child, isn't it useless to try to describe children of any given age group? Defend your answer.
7. Allen is five and on the whole rather mature. On occasion, however, he regresses to a lower level of behavior. When he is ill, for example, he sometimes acts more like a three-year-old. His mother is concerned. What would you say to her if she came to you for advice on this problem?
8. Miss Thompson says that she "plays no favorites" and gives an equal amount of attention to all children in her kindergarten. Do you agree or disagree with Miss Thompson's approach? Why?
9. In what specific ways might a kindergarten teacher ensure that all children experience success in some form daily?

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4. The Kindergarten-Age Child

"No two children are alike" is a statement that no intelligent adult would think to question. That there is much overlapping of characteristics from one age to another no thinking person would doubt. Yet anyone who has observed children or worked with them to any great extent comes to realize that some characteristics seem to be typical of children at certain ages or at given developmental periods. Thus one says that "parallel play"—playing *alongside* other children rather than *with* them—is characteristic of three-year-olds, that "associative play" is characteristic of five-year-olds, and that children below the age of six are usually not capable of truly co-operative play. Of course, many three-year-olds exhibit greater maturity in this area than the "average" five-year-old—and some five-year-olds show greater maturity in their ability to co-operate than some ten-year-olds. These variations may be found in any group.

Despite these individual differences, some characteristics are typical of four- and five-year-old children. The child of this age is concerned primarily with himself, his family, and his playmates. He is an immature being with little conception of his cultural heritage; life to him is a "here and now" existence. Although children of this age are usually friendly, considerate, and sympathetic, they are egocentric; that is, the world seems

the motor skill of the average six-year-old, who spends a great deal of time climbing trees, crawling over and under everything, and doing stunts on the trapeze bar or swing. Most "fives" have matured sufficiently in coordination and responsibility to dress themselves. Some children of this age can even button hard-to-get-at places and tie their own shoes.

Social Growth *

The child approaching the age of five is growing socially as well as physically. He likes to be with other children and, although he may resent interference with his play or possessions, he exhibits less grabbing, pushing, and crying than he did at four. He can now share more and in some instances has become sufficiently mature to curb his desire for the biggest portion. The five-year-old is a dependable individual, eager to please the adults around him—so much so that he may ask for permissions when it is totally unnecessary to do so. In this respect he differs from the four- and the six-year-old. The four-year-old is something of a braggart; the five is a helper and a homebody. The six-year-old, on the other hand, is at a transitional stage of development and tends to be somewhat brash. He quarrels less often but more noisily and is apparently unconcerned with pleasing others.

The child at five is not overly aggressive and is often able to settle his own quarrels without the intervention of an adult. He plays rather well with other children, particularly in small groups of two or three. Indoor play is fraught with more quarreling than outdoor play, probably because of the limitations of the play area indoors.

Both boys and girls of kindergarten age are interested in doll play and playing house—re-enacting their own home life or imitating their parents. Usually there is little sex distinction in play: girls often choose boys for playmates and boys girls. Children

* The child's social growth is also discussed in Chapter 11 and Chapter 13.

of four and five are not so rough in their play as they will be at six, an age at which children often resort to kicking, fighting, and name calling if they do not get their way. This lack of roughness may be related to their general physical development. The six-year-old prefers running games, roller skating, and rope jumping in his play and he is highly skilled at these activities. Four- and five-year-olds, on the other hand, are just learning these skills and probably lack the muscular coordination necessary for six-year-old roughness.

The five-year-old is more at home with himself and less at odds with his environment than he was at four. He is more aware of the reactions of those about him and more sensitive to praise than he was earlier. He tries hard to live up to the expectations of the adults in his environment. The five-year-old may appear to be shy in his approach to adults, but he usually builds up a good relationship with them. This age is one of the most satisfying as far as the child's relations with adults are concerned, because he usually endeavors to please and wants above all to be a good helper. By five the child's horizons have widened so that he is looking for more challenge than his home affords him. He wants to go to school, but, because he has matured only to the point of "five-year-oldness," he hurries to return to the security of his home once school activities are over.

Emotionally, the kindergarten-age child often appears to be calmer in dangerous situations than an older child, partly, at least, because he is as yet too immature and self-centered to realize all the implications of the danger in which he finds himself. Unlike the six-year-old, who tends to go out of bounds under slight stress, and the four-year-old, who is often bossy and dogmatic to cover up his own insecurity, the five-year-old seems to be emotionally well adjusted. Although this is not a fearful age, by the end of the fifth year the child may exhibit some anxieties typical of six-year-olds. He may fear being deprived of his mother (the child at five is a great mother's child), he may fear noises which he cannot identify or localize, or he may fear bodily injury.

In the second half of the fifth year, we may also detect some beginnings of the temper outbursts and screaming that often characterize the behavior of the "sixes" in situations in which they feel inadequate.

Handedness

By the time the child enters kindergarten, he has usually established a preference for using one hand more than the other, although some immature children may still be using both hands interchangeably. There is some difference of opinion concerning the development of left-handedness. Some writers believe that handedness has a physiological basis in the dominance of one hemisphere of the brain over the other. This theory suggests that left-handedness is inherited. Other writers, however, claim that it is the result of chance or faulty training.

Whatever the genesis of left-handedness, the fact remains that we live in a right-handed world. Although our culture is quite tolerant of so minor a deviation, there are some real and practical handicaps in being left-handed. Many things are difficult to demonstrate to the left-handed child—for example, tying a bow or managing such musical instruments as the violin. And only in the last few years have such tools as scissors been manufactured specifically for left-handed people. Even the pouring lips of most kettles favor the right-handed person. The simple act of dining presents problems to the left-handed person; he must constantly be on guard lest his elbow collide with that of his right-handed neighbor. Eating implements are awkward for the southpaw because they are designed for right-handers. It is interesting to note that the French word *gauche*, which literally means "left," has come to mean "awkward" in English.

Although most children eventually become right-handed, there are about 7,000,000 left-handed people in this country,² the

² Ethel Hatchett and Donald Hughes, *Teaching Language Arts in the Elementary School*, New York, Ronald, 1958, p. 271.

majority of them male. The wise teacher will encourage children to use their right hands, but some children will resist any attempt to change their already established preference for their left. To determine whether a child is "genuinely" left-handed, Hildreth suggests observing his use of his hands in cutting, pasting, sewing, or coloring. If he shows dominant use of his left hand in 75 per cent or more of all observations, he should be classified as left-handed.*

There appears to be some basis for the theory that forcing a child to change his hand preference may cause some disturbances in his development. For example, he may exhibit a tendency to stutter. Of course, stuttering which apparently begins with the forced change in handedness may be caused by factors in the situation other than the change itself—for example, by the teacher's methods or the child's tensions and confusion. Further, stuttering does not occur in all instances of such change. The fact remains, however, that there may be a possibility of causing some disturbance in the child if he is forced to change an already established hand preference. If the child appears to resist the use of his right hand, therefore, it may be best to allow him to use the hand he prefers.

The I.Q. and the M.A.

The physical-growth curve appears to slow down at age five, but mental growth continues on its ascent unabated. The child in kindergarten is learning at an incredible rate. In the growing child, increasing age means increasing capacity to learn, to think, and to solve problems of graduated difficulty. At any stage of development the child is capable of performance of which he was not capable at a previous stage.

The child's ability to accomplish more and more difficult intellectual feats as he grows older is expressed in the concept

* Gertrude Hildreth, *Readiness for School Beginners*, Yonkers, World Book, 1950, pp. 62, 63.

of mental age (M.A.). An M.A. of 5 indicates that the child's score on a standard intelligence test, such as the Stanford-Binet, equals that of the "average" five-year-old. If, on the other hand, a five-year-old earns an M.A. of 7 on such a test, we know that he is performing well beyond the norm for his age.

To determine the rate of a child's mental development, we use the concept of the intelligence quotient (I.Q.). This is a comparison of M.A. and chronological age (C.A.), as expressed in the formula

$$I.Q. = \frac{M.A.}{C.A.} \times 100.$$

The child described above has an M.A. of 7 and a C.A. of 5. His I.Q., therefore, is $700/5$, or 140. For 46 per cent of the population at large, I.Q. scores range between 90 and 109, 100 being the average (see table). It is apparent, therefore, that a

*Interpretation of Intelligence Quotients
on the Revised Stanford-Binet **

I.Q.	Verbal description	Per cent in each group
140 and above	Very superior	1
120-139	Superior	11
110-119	High average	18
90-109	Average	46
80-89	Low average	15
70-79	Borderline	6
below 70	Mentally defective	3
		—
		100

* Adapted from M. A. Merrill, "The Significance of the I.Q.'s on the Revised Stanford-Binet Scales," *Journal of Educational Psychology*, 1938, XXIX, 641-51. Data derived from 2904 subjects aged 2½ to 18.

child whose I.Q. is 140 based on a standardized test of intelligence is an unusually able child. As a rule, the greater the mental ability of the child, the faster the rate at which he learns; thus the child with an I.Q. of 140 learns at a much faster rate than the child with an I.Q. of 90.

It is important for teachers to know both the M.A. and the I.Q. scores of children, but the M.A. may be more significant for teachers of kindergartners. Since the M.A. describes the child's current level of development rather than his rate of progress, it is a better index of his readiness to learn than the I.Q.

We may know, for example, that five-year-old John has an I.Q. of 80. This tells us that he is not developing mentally as rapidly as most children of his age. But it does not give us any information about his possible interests, or the age group with which he would be most at home. However, if we know that he has an M.A. of 4, we can predict that he will have greater success in a group of average four-year-olds than with children of his own chronological age and that possibly his interests will be more nearly like those of younger children than like those of his chronological peers.

Learning and Maturation

Learning is a developmental process closely allied to growth, or maturation. Both factors are at work during the years of childhood, but they are interdependent; one is often, in fact, virtually indistinguishable from the other. It is difficult to determine whether a young child has come to a certain competence or skill through maturation, learning, or a combination of both. When we speak of the young child's "learning" to walk or to talk, for example, it is almost impossible to separate the two factors. Both play a part, but where one leaves off and the other begins cannot be determined.

Although these two aspects of development cannot be divorced, we can see a distinction when we say that Mary has

cal changes, in size or function, which take place in children. Learning refers to modifications in the child's behavior as the result of experience, use, or practice.

During the very early years, growth plays the predominant role in the child's development. Through maturation, he becomes capable of the coordinations involved in such activities as creeping and walking. The infant spends much time in practicing these activities and there is little that can be done to hurry his development. Research has found that intensive practice does not usually enable children to skip a stage in the developmental sequence. As shown in studies by Gesell and Thompson,⁸ added maturity also brings an increased ability to profit from practice. Therefore, as the child matures, he uses what he has learned over and over again, in different ways and to solve increasingly complex problems.

The Thinking of Kindergartners

Because the kindergarten child is immature in years, his thinking has certain limitations. He still thinks largely in terms of the immediate and the concrete; he rarely shows much interest in things not immediately present to his senses, and he is not yet capable of forming generalizations of a high order. His thinking, as we have pointed out, is primarily egocentric. A cat to a kindergartner is "my cat"; if he is very immature, he may find it difficult to understand that "mother" is a different person to each child. He defines things in terms of their use to him: chairs are things to sit on, stoves are things to cook on, and pot covers are things that make a noise when banged together.

Despite these limitations, by the age of five most children

⁸ Arnold Gesell and H. Thompson, "Learning and Growth in Identical Twins: An Experimental Study by the Method of Co-Twin Control," *Genetic Psychology Monograph*, 1929.

are capable of at least elementary problem solving. Because most of his thinking is in immediate, concrete terms, the five-year-old is not yet ready for the reading that he will be expected to do in the succeeding school year, for success in reading depends not only on a good deal of maturity and experience but also on the ability to handle highly abstract symbols. The symbol *tree*, for example, must stand for the green and growing thing the child knows. The symbol *house* stands for the place he knows as home. Most five-year-old children are not yet ready to handle such abstractions. Moreover, at this age the child has not yet developed the eye-hand coordination that he will need in order to read and write.

At five most children are becoming more successful at distinguishing fact from fancy, although many "fives" still indulge in "tall tales." At this age the child is more critical of his own performance than he was at four and therefore does not brag about his own creations as much as he did earlier.

The Interests of Kindergartners

Although there may be some differences among socioeconomic groups in this respect, most four-year-olds—if they have the opportunity—and five-year-olds show an interest in going to school and in doing the things that school children do. Most young children are eager to do what older children—and adults—are doing.

Most kindergarten-age children like to look at books; some five-year-olds pretend to read, and those who are more mature get great enjoyment out of copying letters and numbers from printed materials. Some "fives" already are asking at breakfast time, "What does it say on the box of cereal?" Or they may notice that "some of the letters on the sign are like the ones in my name."

Usually the five-year-old kindergartner knows his own name and sometimes his address. He may know his father's name but

often not that of his mother—she is known only as “Mama.” A good many children of this age can distinguish their right from their left hands, but they may have difficulty in making the distinction in others.

Many five-year-olds know the names of the colors. Girls are often ahead of boys in this respect, perhaps because our culture places more importance on color where girls are concerned. In many other respects as well, girls are more mature in interests and abilities than boys of the same age.

The kindergarten child seems to derive pleasure from the simple act of counting. The four-year-old may have greater difficulty than the five-year-old in attaching a specific number to a collection of objects, especially if the number is over ten. Five-year-olds often show rather mature understandings in this area, depending on their background of experience and general ability level.

Understanding Time Sequences*

The “fives” have a better grasp of time sequences than the “fours,” but they still have little understanding of epochs. Many are the kindergarten teachers who have been asked if they knew Moses or George Washington! It is difficult to interpret the past to children of this age—the teacher and Moses are readily placed within the same historical period. Anything earlier than yesterday or later than tomorrow is difficult for the four- or five-year-old to understand.

However, children of this age are beginning to show an interest in measures of time such as clocks and calendars. Interest in the first may reflect an awareness that clocks can indicate when going-to-bed time or going-to-school time has arrived. Interest in the calendar arises with the dawning realization that the time distance to a birthday or Christmas is measurable. Most kindergartens are equipped with some form of calendar to help

*Time sequences are also discussed in Chapter 15.

children learn the names of days of the week and the months and other facts about time. Although no formal attempt is made to teach children of this age how to tell time by the clock, they can be taught to recognize the time for juice, for rest, and for going home by the position of the clock hands. A few may even learn to tell time accurately.

The Development of Language ¹

Language has become one of the four- or five-year-old's most important tools for thinking and communicating. Imagine if you can a group of kindergarten children pursuing the activities of the day in silence! Vocal expression is as characteristic of children's play as is breathing. At five the child still enjoys experimenting with sounds, but he is less interested in this pursuit than he was at the age of four, when he delighted in repeating nonsense syllables and rhymes, such as "mommy-pommy-wommy" and "daddy-paddy-waddy." Experimenting with sounds appeals to the child's sense of humor and may actually benefit him by increasing his ability to distinguish among as well as to reproduce various sound combinations. The five-year-old asks many questions but, unlike the four-year-old, he seeks information. At the earlier age he often asked questions to hear himself talk; the four-year-old is his own best audience.

The child's language ability develops at an amazing rate. According to one estimate, the average child at four has a speaking vocabulary of about 1500 words; at age five, it has grown to 2000. By age six the child is acquainted with about 2500 words.²

The preschool child uses nouns more often than any other part of speech, but he also uses verbs, adjectives, and pronouns. The five-year-old is capable of composing sentences of nine or

¹ Language is also discussed in Chapter 9.

² See, *inter alia*, M. K. South, "Measurement of the Size of General English Vocabulary Through the Elementary Grades and High School," *Genetic Psychology Monograph*, 1942, XXIV.

ten words; usually the larger the child's vocabulary, the longer the sentences he uses.

Along with the child's growing ability to use language goes an increasing ability to comprehend and to make verbal explanations. However, because the English language is full of words which sound alike but have different meanings, it is necessary to help the young child clarify word meanings. Idioms or careless use of language on the part of adults may also confuse the child. One child whose father said that deer "fly" through the woods asked where the deer's wings were—an understandable mistake for a five-year-old!

The very young child is satisfied merely to know and repeat the names of things. This practice seems to give him some control over his environment. But with increased maturity comes an increased interest in causal relationships. The child's confusion in causal relationships is more often due to lack of information than to his inability to use language correctly or to think through a problem. To the young child, lacking knowledge of wind currents and pressure areas, it seems logical indeed to reason that "the trees make the wind blow." The child's language in this instance reflects his ignorance. On a simpler level, however, the five-year-old can handle language involving causal relationships. At this age quarreling involves more words than it did at an earlier age. Many five-year-olds can support their side of an argument—"I hit John because he pushed over my blocks." They can make decisions involving rather mature understandings—"I think we ought to put the toys in the shelter because it might rain," or, "Susan shouldn't paint without putting on an apron because paint is hard to wash out if it gets on her dress."

The Child as an Individual

Although children are sufficiently alike to be taught successfully in groups, they differ greatly from one another. Good teaching takes account of the abilities which children have in common

as well as of their special capacities. It provides an educational environment which gives the individual child opportunities to develop his abilities to a high degree while enabling him to grow in group responsiveness and the ability to work for group goals.

Children are able to learn at an early age that no two people are alike in capacities or interests and that each child can make an acceptable contribution. Each child is far too complex to be described by such all-inclusive words as "good" or "bad," "bright" or "dull." Each child has potentialities as well as limitations; good education discovers and unfolds the potentialities, while at the same time minimizing the limitations.

Problems for Discussion

1. Why are young children egocentric? Is egocentrism an undesirable characteristic? Is it only found in young children?
2. What is meant by the "normal range" in describing any characteristic? How does the concept differ from the "average"?
3. Assume that you are a kindergarten teacher in a middle-class area. The parents are concerned because their children are having a great many stomach upsets and colds. What advice would you give these parents to help them with this problem?
4. Bob, who is four, spends some time coloring but often seems frustrated because he cannot "stay in the lines." Susan is the same age but, unlike Bob, appears to enjoy the activity and spends much more time at it than Bob does. What developmental factors might explain the difference between Bob's and Susan's attitudes toward coloring? Do the expectations of the culture play any role here?
5. Mrs. James' five-year-old son seems to prefer to use his left hand for such activities as coloring and cutting. She is concerned that the child will grow up to be left-handed. What help and assurance could you give Mrs. James regarding handedness? What suggestions would you give regarding efforts to change the child's handedness?
6. Does the infant "grow" to walk or "learn" to walk? Does he "learn" to talk or "mature" to talk? What is the difficulty involved in dis-

- Discussing the relative contribution of maturation and learning to the development of any specific ability?
7. The parents of five-year-old Jack are extremely disturbed because he has lied to them on occasion. They say that he cannot seem to understand the meaning of the word "honesty." What factors regarding the thinking of five-year-olds and their use of words would you call to the attention of Jack's parents?
 8. Why is talking called a "tool" for thinking? Is talking absolutely necessary to thinking?
 9. What maturity factors cause the quarreling of five-year-olds to differ from that of two- or three-year-olds?

Suggested Additional Reading

- About Children, How They Learn, Feel, and Grow*. Reprint Bulletin from issues of *Childhood Education*. Washington, D. C., Association for Childhood Education International.
- Bayley, Nancy. *Studies in the Development of Young Children*. Berkeley, University of California Press, 1940.
- Davis, Allison, and Havighurst, Robert J., *Father of the Man: How Your Child Gets His Personality*. Boston, Houghton Mifflin Co., 1947.
- How Children Develop*. Adventures in Education, University School Series No. 3. Ohio State University, Columbus, 1946.
- Wolf, T. H., *The Effect of Praise and Competition in the Persisting Behavior of Kindergarten Children*. Institute of Child Welfare Monograph Series No. 15, Minneapolis, University of Minnesota Press, 1938.
- Wolff, W., *The Personality of the Preschool Child: The Child's Search for Self*. New York, Grune & Stratton, Inc., 1946.

5. *The Kindergarten Teacher*

One of the most challenging tasks in the field of education is the selecting and training of teachers. All our research in child development, good buildings and equipment, and curriculum construction avail us nothing if we are unable to enlist for the profession of teaching the energy and enthusiasm of people who are superior in their ability to work with children.

The Importance of the Teacher's Personality

It is only in comparatively recent years that we have come to understand fully the importance of the personality of the teacher *in the life of the child*. Although we now emphasize learning on the part of the child rather than teaching by the teacher, we recognize that the teacher's personality has a far-reaching influence on the children whom she is guiding. It has been said, in fact, that "the emotional well-being of young people can be expressed largely in terms of their relationship with adults"¹—and teachers, of course, are the adults the child knows best, next to his parents. The child needs a challenging environment; he also needs an environment in which he feels secure and

¹Fritz Redl and William Wattenberg, *Mental Hygiene in Teaching*, New York, Harcourt, Brace, 1951, p. 235.

wanted. Therefore, he needs an alert and intelligent teacher who is sensitive to his emotional no less than to his intellectual and physical needs.

It is no longer enough that the teacher possess sound knowledge of subject matter. Today's educator must be an intelligent, well-integrated, far-seeing person, capable of maintaining a classroom atmosphere that is confidence-inspiring, facilitating rather than frustrating. This is true particularly of the kindergarten teacher, whose job is not to impart knowledge but to help the child to make the transition from home to school, and thence to the larger community, smoothly and eagerly. For the child's development the emotional climate of the kindergarten is of supreme importance.

This concern for the emotional climate of the classroom marks a forward step in our thinking about the "whole child." Teachers and children live together for many hours a day; if they are to live happily together, there must be an atmosphere of approval, in which the child can experience belongingness and security. The child must feel that he has a safe base from which to face life. Good teaching involves teamwork between children and teachers, and this is possible only when a friendly, congenial relationship exists between them. We know that adults work better and learn more in an atmosphere of approval than in one of indifference or hostility. If this is true of adults, how much more true it is of children!

The personality of the teacher is important also because it is she who sets the stage for learning. Teachers are not "merely the machines by which education experiences are made available to children. They are part of the active environment of the child."² In this sense, as Prescott points out, they are personnel workers; therefore, intelligence, sympathetic insight into the needs and behavior of children, and skill in getting along with

² Daniel Prescott, *Emotion and the Education Process*, Washington, D. C., American Council on Education, 1938, p. 281.

them may be more important attributes than erudition, ability to maintain discipline, or knowledge of teaching techniques.³

These last-named characteristics are also important, of course, but what is perhaps more important is how children *feel* about school and teachers. A study by Eiserer⁴ indicates that when children have good feelings about school, when they view their teachers as friendly and helpful, their intellectual, emotional, and social development is greatly facilitated.

Children come to school with ideas about school and teachers already formulated. Although some are negative or ambivalent, according to Eiserer, "In a great majority of American communities the positive influences . . . outweigh the negative. It is a defensible view that children in the present, to a greater degree than in any previous generation perceive the school favorably." They look upon teachers as persons who want to help them.

Although some adults feel that children have taken over the schools, this study shows that from the viewpoint of the child, at least, the teachers are in charge. "Teachers call the plays, dispense rewards and punishments, define the limits of action." When this is done "with humane consideration of the child," Eiserer points out, "it is accepted, especially in the early years, without conscious resentment or conflict."

Studies such as these are important because they demonstrate that the attitudes teachers show toward children are powerful influences in the lives of children. The development of children in school is largely dependent on the relationship between teacher and children—especially, perhaps, at the kindergarten level. The teacher of any age group has a certain amount of "prestige value": she has lived longer, she is an adult who reflects adult wisdom, and she is usually physically larger than her pupils. Kindergarten children on the whole are still largely

³ *Ibid.*, p. 195.

⁴ Paul E. Eiserer, "Children's Perceptions of School and Teachers," *Educational Leadership*, April 1954, pp. 409-12.

adult-oriented. They need much assistance from adults to meet personal needs. They constantly seek adult help in working out their problems. They are less concerned with what other children think about them than with the opinion of adults. In the kindergarten, "the child's relations with the teacher take precedence over his relations to other children."⁶

The teacher, then, has the power and the responsibility to create a good emotional climate in the classroom. This means a friendly, informal atmosphere characterized by mutual acceptance and respect of teacher and children. Such good emotional climates are perhaps more characteristic of preschool groups than of any other level. Ryan found that "in work with younger children generally there was an encouraging trend toward conditions and practices that make for good mental health."⁷

Like the term "the whole child," "mental health" appears frequently in educational literature. And our concepts concerning both terms tend to be rather vague. Most educators seem to agree, however, that mental health involves, first and foremost, self-acceptance, the ability to appraise one's assets and liabilities, to exploit the former and learn to live with the latter. An individual who is in good mental health is one whose goals are reasonable in terms of his capabilities and who works consistently toward those goals. Mental health also involves the ability to establish and maintain wholesome relationships with others—an ability which depends to a great extent on self-acceptance.

A significant aspect of mental health from the teacher's point of view is the extent to which it is acquired, not inherited.⁸ The school therefore has the responsibility of providing an environment conducive to the development of good mental health. Such

⁶ Henry J. Otto, *Social Education in Elementary Schools*, New York, Rinehart, 1956, p. 71.

⁷ W. Carson Ryan, "The School and Mental Health," *Understanding the Child*, October 1954, p. 112.

⁸ Lee J. Cronbach, *Educational Psychology*, Harcourt, Brace, 1954, p. 521.

an environment is one which does not make unreasonable demands on the child, in which he can work out satisfactory relationships with other children and with adults, in which he is free to make mistakes without fear of undue censure or disapproval, and in which he is helped to recognize and realize his potentialities most effectively.

Characteristics of a Good Teacher

There is probably no single configuration of personal attributes that describes all effective teachers. Many authorities, however, have attempted to list some of the personality traits that seem to result in effective relationships with children. The factors which Symonds* believes to be important are:

1. A liking for teaching.
2. Personal security, respect for self, dignity, and courage.
3. Ability to identify self with children.
4. Emotional stability: the ability to accept the less desirable characteristics of children, such as aggression and carelessness, as well as the desirable, such as industry, efficiency, and brightness.
5. Freedom from anxiety: the ability to permit a certain amount of disorder in the classroom without fear of censure from superiors.
6. Unselfishness.

Burnham* lists the following as characteristics of "great teachers":

1. Devotion to an absorbing task.
2. Wide and varied interests.

* Percival M. Symonds, "Personality of the Teacher," *Journal of Education Research*, May 1947, XL, 652-71.

* William Burnham, quoted in Ruth Strang, *The Role of the Teacher in Personnel Work*, New York, Teachers College, Columbia University, 1948, p. 20.

3. Ability to focus on the present situation, to mobilize one's complete energy and personality for the task at hand without dissipating energy by fear of failure or censure and regret for what has been done.
4. Ability to face reality objectively.
5. Ability to inspire confidence.
6. Emotional maturity, including the ability to help children become increasingly independent without being dependent on children as an "emotional outlet."
7. An orderly association of ideas.

These listings have not put the traits in order of importance and both have been made by adults interested in teachers or in mental health. In a study by Paul Witty,¹⁹ elementary and high-school children listed the following characteristics of "the teacher who has helped me most" in order of importance:

1. Willingness to co-operate, democratic attitudes.
2. Consideration for people, kindness.
3. Patience.
4. Wide and varied interests.
5. Good personal appearance, pleasing manner.
6. Fairness, impartiality.
7. A sense of humor.
8. Good disposition, consistency in behavior.
9. Interest in problems of children.
10. Flexibility—ability to adapt to situations.
11. Use of recognition and praise.
12. Proficiency in teaching subject matter.

To the present writer, a sense of humor seems to be one of the most essential characteristics of a good teacher. Children need to have warm and hearty people around them—people who can laugh and have fun. Some teachers seem to be afraid of

¹⁹Paul Witty, "An Analysis of the Personality Traits of the Effective Teacher," *Journal of Education Research*, May 1947, XL, 662-67.

themselves with children, afraid that children will somehow get out of hand if the teacher relaxes with them. A well-developed sense of humor protects the teacher's own mental health as well as that of the children. It is sometimes the most effective tool in solving disciplinary problems. It is a safeguard against tensions and anxieties. Often being able to "laugh off" a difficult situation solves an entire problem. The wise teacher soon recognizes that a false sense of dignity can stand in the way of successful discipline. Better teacher-pupil relationships exist in an atmosphere in which teachers take time to have fun with children and to laugh with them. Friction subsides when teachers cultivate the play spirit and develop the ability to share a joke with children. A sense of humor, it has been said, is "obviously the most essential characteristic of skillful handlers of discipline problems."¹¹

The teacher of young children also needs to possess an extra measure of physical and emotional stamina. The first is needed because there is much physical work involved in teaching kindergarten children, as the aching back and thigh muscles of many a young teacher testify. Emotional stamina is of the utmost importance because, as we know from much research, children learn better with a teacher who is calm in voice and manner and who brings to her classroom a well-balanced personality. The personality of the teacher, in fact, can affect the atmosphere of the classroom even more than her methods of teaching. Emotional states, unfortunately, tend to be contagious, and children are highly susceptible to suggestion;¹² the nervous and erratic teacher is likely to find that she is teaching children who have caught her symptoms. The teacher who is disappointed and spiritless is likely to have listless and dispirited children. The teacher who is maladjusted can cause more problems than any

¹¹ George V. Sheviakov and Fritz Redl, *Discipline for Today's Children and Youth*, Washington, D. C., National Educational Association, 1950, p. 45.

¹² John A. Bronson, "Problem Teachers," *Educational Administration and Supervision*, March 1943, XXIX, 177-82.

agency can cure. Sheviakov and Redl¹³ report that about 60 per cent of school disciplinary cases are related to a combination of factors in the personal history of the child and "some deficiency in the psychological structure of the group"; in about 30 per cent of the cases, problem behavior is "produced entirely by group psychological inadequacies of school life"; only about 10 per cent of all cases are "simple cases of individual disturbances." They conclude, "When something is wrong with the group in which an individual lives, even the most normal individual is likely to produce confused action leading into problem behavior." And the teacher's personality to a large extent determines the psychological climate of the group. The teacher's method of responding to her pupils sets a pattern which the children tend to follow in their relations with one another.

The personality of the teacher is also reflected in her conception of what constitutes behavior problems and in her handling of them. Her definition of "good" behavior is a result of her own personality and value system. Teachers are on the whole members of the middle class, "the most rigid part of our culture,"¹⁴ and schools in our society tend to foster middle-class values. These values include "honesty, brotherly love, submissiveness to recognized authority, cleanliness, tidiness, puritan morality concerning sex, and the proper things to do at all times." They also specify "respectable" forms of recreation, stress "the major value of putting off present satisfactions for possible future gains, which when lived up to means a minimum amount of satisfaction other than one of saving," and emphasize "not expressing natural feelings of aggression, never losing one's temper or getting angry. In general, there is a prohibition against the expression of feelings of any kind." In the value system of the lower class, on the other hand, much more freedom regarding

¹³ Sheviakov and Redl, *op. cit.*, p. 44.

¹⁴ *Growing Up in an Anxious Age*, Washington, D. C., Association for Supervision and Curriculum Development, National Education Association, 1952, p. 63.

sex behavior is accepted, and cleanliness and tidiness are not so highly valued; in short, the entire pattern is less structured and rigid than in the middle class.

The teacher herself, like many another "normal" adult, may find this value system difficult and frustrating to live by; she herself may occasionally become angry or in some other way transgress the rigid code of middle-class mores. Unable to accept some of these behaviors in herself, she becomes unable to accept them from children. But when the teacher (or parent) is able to understand and to accept her own behavior, she then can accept that of the children in her charge, whether or not it conforms to her own behavioral standards. Teachers should recognize that the behavior of children, as well as that of teachers, is determined by their background and experience and does not grow out of "natural sinfulness." Because our culture is predominantly middle class, it is probably desirable to inculcate the middle-class values in children; but children who meet these values for the first time in the classroom should not be penalized for behavior that conflicts with the standards to which the teacher subscribes.

The teachers who are most successful with young children are those who give them much loving affection, who share fun with them, and who give them a chance to relieve their emotional tensions. In short, they are warmhearted beings who admit their human fallibility and who are able to accept actions and expressions that are childlike without condemning the child.

To the casual observer, the small child's desire to manipulate, to examine things to see what makes them go or how they are made, may appear to be destructiveness. But it is just this desire to handle, to manipulate, to experiment with things, that has developed in man a hand capable of an infinite variety of skills. The child needs, therefore, surroundings that will give scope to his curiosity if he is to progress healthfully mentally and physically.

Teachers of young children are such important people because of the lasting influence of early learnings. It is important

to the child as well as to society that first learnings be sound and good. It goes without saying that the successful teacher of the young is aware of the latest scientific knowledge about children. She knows how children grow and what they need to help that growth; she knows that children need love—warm, glowing, and secure. She takes delight in small beginnings; she is patient with the fumbling efforts of immaturity. She realizes that every growing child needs to feel his own worth and developing power, and that each individual needs recognition. She has confidence in his ability to succeed, because she sets tasks that she knows to be within his capacity.

As a rule, the greater the child's security in his relationships with his teacher, the harder he tries, and the sooner he succeeds in achieving successful adjustment. From a study of teacher-pupil relationships, Bush¹⁵ concludes that the mutual liking of child and teacher is one of the most important factors in bringing about an effective learning relationship. He found, in fact, that teachers who knew most about the children they were teaching had a better teacher-pupil relationship than those who were concerned primarily with subject matter.

The child is the reason for the school; he is the one for whom we strive to provide an environment in which educationally profitable experiences can take place. A knowledge of the child—how he grows, what his interests and purposes are, how he learns—provides the foundation upon which we can build an effective educational program. In the last analysis, the child himself determines what he will learn. As John Anderson points out,¹⁶ "If a child is given a problem which can be solved and if he is motivated to respond, correct responses will appear, in time, regardless of whether or not a teacher is present or instruction given. All that is essential is that right and wrong responses

¹⁵ Robert Nelson Bush, *The Teacher-Pupil Relationship*, New York, Prentice-Hall, 1954, pp. 188-89.

¹⁶ *Early Childhood Education, Forty-sixth Yearbook*, Chicago, National Society for the Study of Education, University of Chicago Press, 1947, II, 92.

have different outcomes. If guidance and demonstration of good procedures are added, the child will make greater progress. Literally, "then, a teacher does not teach; she guides a process inherent in the child which would go on even if she were not present but which should go on more effectively if she is present. She motivates the child in a process of self-education."

Problems for Discussion

1. Miss Jones says she never displays any impatience with children because this would stamp her as "emotionally immature." Do you agree?
2. Five-year-old Jim has very superior intelligence and has demonstrated that he is capable of performance beyond the average of the kindergarten class. For example, he has painted some extremely skillful pictures. But sometimes he merely daubs paint. The teacher always praises him, regardless of the effort he has expended, because she feels that if she doesn't he will become discouraged and daub all the time. Do you agree? How would you handle Jim if you were his teacher?
3. Cite an instance from your own childhood experience in which a teacher or other adult smoothed over a difficulty by laughing it off. Give an example of a disciplinary problem which would be better laughed off than handled seriously.
4. Would it be possible for a teacher to use her prestige in a group to the detriment of children? Explain and give examples.
5. Ryan found that conditions for the promotion of good mental health were found more often in preschool groups than at upper educational levels. How do you account for this?
6. Miss Frank is always in a hurry and has a rather loud, high-pitched voice. There seems to be a great deal of whining and crying as well as shouting among the children in her kindergarten. Can you suggest any explanation for this behavior?
7. Mr. Lyman, the principal of your school, has asked you to take a child in your kindergarten to task because, says Mr. Lyman, "The child was using bad language on the playground." You know something about the background of this child—that he comes from

an underprivileged home and that his parents have had only a very rudimentary education. How would you respond to Mr. Lyman's request? What would you say to the child?

8. Of what value to a teacher is a visit to the home of a child?

Suggested Additional Reading

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6. The Kindergarten Day

The kindergarten child is learning at an incredible rate, probably at a greater rate than at any other time in his school career. Teachers and parents expect children to be eager to learn, and anyone who has observed children knows that they are. But there are limitations imposed by immaturity, and whatever learning is expected of the young child needs to be adapted to his limited capacities. Perhaps any curriculum which is developed for four- and five-year-olds represents some compromise between theory and practice.

Kindergartens should not be "clock bound," but there should be some framework around which daily activities are built. Having some sort of schedule frees both the child and the teacher so that attention may be given to other problems. A schedule can, therefore, help the child to become a more self-directing individual; it must never be an end in itself. Knowing that "after we have washed our hands, we have lunch" enables children to direct themselves and frees them of the need for constant guidance by adults. A schedule helps also to make the kindergarten a dependable place in which to live. If schedules do not serve these purposes, the teacher should re-evaluate their use.

There are many factors involved in building the daily program of the kindergarten, and it is probably impossible to design

a schedule suited to all children and to all schools. There is no "best way" of teaching kindergarten. Only the teacher herself, knowing her children and their backgrounds, and aware of the facilities at her disposal, can plan a program of activities which is psychologically sound, interesting, and challenging. Adaptations must also be made in the light of the general routine and administrative policies of the school. Even climatic conditions must be considered; in areas where the weather is mild, many activities can be carried on outdoors which in other areas must be part of the indoor program. (Whatever the climate, however, four- and five-year-old children should be outdoors as much as possible.) On pages 91-93 we have suggested three "basic" schedules which the beginning teacher can adapt to her own situation, and on pages 93-96 some special considerations in planning the first day of school.

The "Work-Play Period"

Although variations in programs and schedules are inevitable and probably highly desirable, certain experiences should be part of the program of every kindergarten. One of these is the "work-play period," sometimes called the "self-chosen-activity time." The place of this period in the daily schedule—at the beginning of the day or at some other time—may depend upon whether the children come directly into the kindergarten on arrival or remain outside on the playground until the bell rings. An allowance of one clock hour for this period, whenever it is scheduled, provides ample time for an initial discussion period to plan activities and for the necessary cleanup after the close of the period, as well as for the activities themselves.

It is probably impossible to distinguish sharply between the "work" and the "play" of young children. However, some kindergarten teachers divide this work-play period into two time blocks and designate the materials and equipment which may be used at each time. In such a program, the first part of the

period may be devoted to "work," at which time children use such materials and equipment as easels and paints, blocks, crayons, and other creative media. During the "play" period, children may use wheel toys or doll-house equipment. Those teachers who divide the period into two distinct sections contend that this practice encourages children to become interested in a greater variety of activities. For a child who seems to show interest only in wheel toys, for example, having the use of these toys restricted to some extent may help him to broaden his interests. Other teachers feel that during this period children should be free to choose the activities which interest them and to use any and all equipment or materials in the kindergarten. Most children, they contend, provide themselves with an "adequate diet" of activities, requiring only a little encouragement from the teacher to try something new.

During this work-play period, the child may color, paint at the easel, finger paint, work large jig-saw puzzles, work with tools at the workbench, build things of his own choosing or help in a group project, play in the doll corner, play with large-muscle equipment, such as the indoor jungle gym, build with blocks, or play with smaller toys such as trains or cars. Some children may prefer to spend at least part of the hour in relatively passive or solitary activities; they may look at books, "read" to other children, experiment with musical instruments, or play records. Often some members of the group will use this time for dramatic play.

Planning the Work

Planning the work for the day is an important part of the total work-play-period experience. At first the kindergartner lacks the maturity and experience for detailed planning. But even at this point he is capable of expressing what he wishes to do. He may voice a desire to paint or to build without specifying what he intends to paint or build. As he becomes more mature,

and as he gains more experience in group living, he grows in his ability to plan; by the middle of the year the kindergarten child is able to express his plans more completely and specifically. Whereas in the beginning he merely indicated the area in which he wished to work, he may now say, "I'm going to build a boat." At a later period he becomes capable of planning in groups of three or four children, with guidance by the teacher when necessary. As the child has more experience with a variety of materials and develops greater language facility, his plans become more detailed. He becomes increasingly able to confine his plans to a particular project and to work on that project for a relatively long period of time.

Some children may not be sufficiently mature, even by the middle of the year, to participate in planning to any great extent, and these children need special help from the teacher. However, some children who do not participate vocally may show by what they accomplish that they have listened and understood.

It should be pointed out that not all planning for the work-play period is done at the beginning of the hour. Children's interests change rapidly; after the child has painted at the easel, as he planned, he may need guidance into another activity. The teacher may also need to guide certain children away from too frequent repetition of one activity. A suggestion such as, "Let's go over and see what Bill is making with the blocks," may direct the interest of a child who spends an unusual amount of time at the easel toward the more co-operative enterprise of block play.

Some children may need help in finishing what they have started. The teacher may say to a child who is drawing, "That's a nice tree; do you plan to draw a house too?" and thereby help him to finish what he has begun. The teacher moves about the room, observing the children as they work, and helps them plan as she talks with them.

Even at this early age, children can make substantial prog-

ress toward self-direction, and the work-play period can aid in developing this ability. As Hildreth points out: ¹

A work and play period first thing in the morning during which children learn to select an activity and work at it, alone or with a small group, without demanding the teacher's constant attention or interfering with other children who are busy with their own projects, lays the foundation for self-responsibility during later school years.

"Centers of Interest"

The tendency in today's kindergarten is away from the long-term, rather highly structured "unit" and toward "centers of interest," or group projects initiated by the children themselves, with a minimum of direction by the teacher. These centers may occupy the time and interest of the whole group or of only a few children; they may hold the children's attention for no more than a day or for a longer time. There may be one or more centers existing simultaneously, depending on the maturity of the children, the variety of their interests, and the space available. This tendency is part of the trend toward less formal teaching at the kindergarten level and reflects a recognition of the short attention span of the kindergarten child.

The centers of interest in the kindergarten should be concerned with the environment the child understands, the immediate "here and now" of his living, and they should contribute to his living and learning. Holidays afford excellent opportunities for developing a center of interest; children may set up a toy "factory" at Christmas, or a hat store at Easter, or dramatize Halloween activities. Or children may become interested in boats. Some children may wish to paint or draw a boat; some may develop a picture book about boats; others may model a boat, or build one of blocks or wood at the work bench.

¹ Gertrude Hildreth, *Child Growth Through Education*, New York, Ronald, 1948, p. 251.

And, of course, most of the children will engage in much dramatic play concerned with adult work on boats. One small group may become interested in circus activities and another may develop a center of interest about trains. Some children may wish to paint or model circus animals. Others may show interest in creating stories, poems, or songs about the circus, and they may even begin to do some research by hunting down books on circuses in their own library corner or in their bookshelf at home. The train activity may continue for several days and engage an increasing number of children and the circus activities may last for only a few days. Or the reverse might be true. Needless to say, directing such varied activities requires great skill on the part of the teacher.

The teacher also needs skill in guiding the children to choose suitable centers of interest. If their interest in, say, a telephone office is just "passing," a center of interest developed around this activity will not be very enjoyable or educational. According to Wills and Stegeman,² the activity should interest all the children who participate and should make some contribution to their "social concepts." It should afford opportunities for individual as well as group work, for dramatic play as well as other creative expression. These authors also point out a fact familiar to most experienced teachers: "Sometimes a center of interest which has no appeal for one group may be actively pursued and enjoyed by another." Individual differences reveal themselves in every situation.

Cleanup Time

After work time comes clean-up, and everybody helps. Sufficient time should be allowed for this part of the period and adequate storage space for materials must be provided within the reach of small children. Some equipment is also necessary--

² Clarice Wills and William H. Stegeman, *Living in the Kindergarten*, rev. ed., Chicago, Follett, 1956, p. 222.

brooms, cloths, etc.—with which to clean up. A very adequate child-size broom can be made by merely shortening the handle of a discarded push type or conventional broom. Children should learn early in their kindergarten experience that they are free to use all equipment and materials, but that this freedom carries with it the responsibility, within reasonable limits, for replacing materials after use.

The cleanup period, of course, helps to keep the room orderly, but it has educative values as well which far outweigh this more obvious purpose: it teaches the child to assume a responsibility and carry it through. The young child's cleaning efforts are clumsy at first, but, given adequate equipment and sufficient time, he readily learns to do a creditable job. Some children, here as in other areas, may need special help. In some homes, maids or parents clean up after children; in others, no one bothers to teach the child to be orderly—either because this trait is not valued by the parents themselves or because they apparently believe that the child will somehow acquire it without guidance.

That children should learn to clean up efficiently after themselves does not mean that they should take over the work of the custodian. There are some cleaning jobs beyond the ability of four- and five-year-olds, and even the best efforts of children cannot match the efficiency of a trained custodian with his specialized equipment. Nevertheless, taking care of their own cleaning up at their level of ability gives children a valuable learning experience.

Children should learn to recognize the signal used by the teacher to indicate that the end of the work hour has arrived and that it is time to begin putting things away. Children should be encouraged to share in group cleaning up as well as to assume responsibility for cleaning up after themselves. Those who have finished should sit quietly in the library corner or at the customary meeting place of the group until the rest have finished. If they are given adequate time, commendation for work well

done, and help by the teacher when the task becomes too difficult, children soon learn to take great pride in an orderly room.

The Evaluation Period

The older kindergarten child is beginning to develop the ability to judge his own performance, and school experiences can further his development in this area. For this reason, a time for evaluation should always be a part of the work-play period. Evaluation, of course, takes place informally while children are working, but there should be a special time reserved for it at the end of the hour, when children can take a closer look at what they have done and discuss how it can be improved. Evaluation time can also help children learn to accept suggestions from others concerning their work. Needless to say, the teacher should avoid—and help children to avoid—petty criticism and comparisons of one child with another. It is the job of the teacher to teach children to give constructive suggestions as well as to help them accept the evaluation of their classmates. The evaluation period should help the child find new respect for himself and for what he has accomplished and to feel the success and security he needs in order to accomplish bigger and better things in the future.

If a group project is occupying the interest of a large number of children, a progress report may be part of the evaluation period. If the project is of concern to only relatively few children, evaluation may be carried on more effectively while the children work. In order to keep kindergartners interested, things need to be kept moving at all times—particularly during periods when the children are sitting in a group. Therefore, the evaluation period must be lively in order to hold the attention of the group.

Children should be encouraged to tell about what they have made, but not all children should be expected to discuss their work every day. The teacher determines which children can profit most from the activity on any particular day. By calling

the attention of the group to the achievements of three or four children (different ones every day), the teacher both encourages the shy young artist to talk about his picture or sculpture and demonstrates to the other children that something commendable can be found in the work of everyone. The child himself may voice dissatisfaction with some aspect of his work; perhaps he is concerned because the colors on his picture ran or because the dog he has modeled doesn't look like old Spot. In this case the teacher—with the child's permission—may ask for constructive suggestions from the other children. At no time does she solicit or encourage destructive criticism from the group. She must make every effort to ensure that the child whose work is under discussion does not become discouraged as a result of this activity.

Participation in these evaluation sessions, both as critic and as creator, should demonstrate to the child that criticism can and should be fair and impersonal. With the teacher to help by creating an environment in which he feels secure and accepted, the child should learn not to fear being judged. The teacher must make certain that the child himself is aware of his accomplishments and his abilities, so that he can respond to criticism with confidence, knowing that he will be able to do what is necessary in order to improve.

Often the child himself is able to tell how he can improve his work. The development of the capacity for self-evaluation should be encouraged by giving children many opportunities to judge their own performances. Relatively few five-year-olds develop this ability to any great degree, but some children can evaluate their own efforts in a rather mature way. Children should always be assured that they can meet the standards of improvement set by themselves or by their peers.

The Rest Period

Rest is universally considered a necessary part of the regimen of the young child at school. A rhythm of rest and activity is one

of the fundamental needs of man. The growing child requires a great amount of muscular activity which must be balanced with sleep and other relaxation. After a short rest period, the child's emotional control, his ability to pay attention, and his general behavior are improved. Children should also be helped to learn to relax when awake; this kind of relaxation is too often neglected by adults in a rush to "get things done."

The special needs of a particular group of children, their age, the general daily program, the size of the group, and the length of the daily session are all factors to be considered in determining the kind of rest period best suited to the children's needs. It is important, however, that a rest time be part of every day's program, for consistency will help to establish the habit of relaxing. The teacher of kindergarten-age children should watch for signs of fatigue, such as excessive crying, irritability, or shrillness of voice, since children of this age may fail to recognize that they are tired and these behavior manifestations may be the best indication that they need rest.

The rest period may vary from fifteen to thirty minutes, depending on the factors mentioned. It is usually scheduled near the middle of the session, following a period of activity. The room in which children rest should be well ventilated and the shades drawn to create an atmosphere of quiet. Either cots or rugs are satisfactory, although cots are of course preferable. Some simple precautions should be taken to prevent the child's resting on a soiled surface or in a draft. Tying or taping a brightly colored piece of yarn on the "up" side of the rug, plus a little care in folding and storing, will ensure a clean resting surface for the child. Testing the room with a lighted candle will indicate the source of drafts, and placing a rug against an offending door will help to prevent moving air currents from blowing on children directly.

At first not all children will be able to relax; some may need to begin their rest period before others in order to relax thor-

oughly. Much of the success of this period of the day depends on the preparation made by the teacher. The children may learn the meaning of relaxation by discussing the need for rest with the teacher or by playing "rag doll." Throughout the period, the teacher should remain quiet, talking only when necessary to help children who are having difficulty in relaxing. She may point out children who look comfortable and relaxed or gently pat a child who appears tense. As a rule, when the teacher calls children to put their rugs or cots away, she chooses first the children who are able to rest completely from the beginning of the period, allowing the child who relaxes slowly to have a longer period of rest.

Lunch Time

It is now generally considered desirable for young children to be given some kind of simple nourishment toward the middle of the kindergarten morning and afternoon. Since a good many young children dawdle over breakfast, it is especially important that nourishment of some kind be provided at the morning session. Eating should not be immediately preceded or followed by vigorous activity. In many kindergartens children are given fruit juice or milk and crackers following the rest period.

In addition to satisfying nutritional needs, this "lunch period" gives children an excellent opportunity to learn and practice good eating habits, to develop acceptable table manners, and to experience the satisfaction of doing things for themselves in a social group. Children can take the responsibility for folding and distributing napkins, placing the cups, counting out the correct number with the help of the teacher, or even pouring out their own juice.

Teachers can expect four- and five-year-olds to spill their milk or juice at lunch time. Therefore they should keep adequate cleanup equipment nearby and pay no more attention than absolutely necessary to accidents.

Other Aspects of the Kindergarten Day

Rhythms, games, and singing are important activities in the kindergarten, and time should be provided for them in every day's schedule. In some schools the period allotted to these activities regularly follows the rest period; in other schools it follows the midsession snack. If the latter plan is in use, it may be necessary to restrict the activities somewhat since eating, as we have said, should not be followed by vigorous exercise and even singing for young children is accompanied by much bodily movement. Following this activity, and just before the child returns home, the teacher (or a child) may wish to tell a story, or the group may wish to dramatize a familiar story. This period is an integral part of the kindergarten day, and ample time should be allotted to it, with allowances for special conditions of weather or school routine.

Learning to put on his outer clothing should be part of the educational program for the young child; sufficient time should be allowed for this important activity at recess and at "going home" time. To deny the child the opportunity to learn to become independent is to deprive him of one of the most important values of the kindergarten.

At least a half hour in the kindergarten day should be devoted to outdoor play, followed by a few minutes' rest. Play is an important part of the young child's life; it helps him to develop many of the social and physical skills he will need as he goes through life. Children do not need to be taught to play; when properly clothed, they enjoy vigorous outdoor play regardless of weather.

Suggested Schedules

As we noted earlier, no single plan for kindergarten activities can be applied to all situations. In some schools children remain all day, having both noon lunch and afternoon nap in the kinder-

garten. In other schools children attend a single two-and-a-half- or three-hour session. In still others there are three "shifts," and the problem is to give children the best possible education in the shortest time available.

However, there are certain principles which can be followed in planning activities for four- and five-year-olds. As we have said, there should be an alternation of quiet and vigorous activities throughout the day; young children cannot remain quiet for long periods and they may become overstimulated by too much activity. There must be an easy transition from one activity to another without the necessity of constantly rearranging the room. Other principles have been suggested throughout this chapter. To help new teachers who may have to make their own schedules, a few typical programs are presented below. The first two schedules are for half-day (morning or afternoon) kindergartens; the last, for a full-day program.

1. Kindergartens where children remain outside until time for school opening.

A.M.		P.M.
9:00-9:30	Opening Roll call Conversation Planning	1:00-1:25
9:30-10:20	Work-play period Cleanup Evaluation	1:25-2:00
10:20-10:30	Toileting Washing hands	2:00-2:10
10:30-10:45	Midsession lunch	2:10-2:25
10:45-11:10	Rest	2:25-2:40
11:10-11:30	Singing Rhythms	2:40-3:10
11:30-12:00	Story time Getting ready to go home Outdoor play	3:10-3:30

2. Kindergartens where children enter informally as they arrive at school and begin working. This schedule makes planning somewhat more difficult; if attendance records must be sent to the principal immediately after opening of school, the work-play period may have to be interrupted. Some teachers using this approach plan with children for the next day at the end of the period, during evaluation time.

A.M.		P.M.
8:50—9:50	Work-play period Cleanup Evaluation Planning for next day Roll call	12:50—1:30
9:50—10:20	Outdoor play Toileting Washing hands	1:30—2:00
10:20—10:35	Midsession lunch	2:00—2:15
10:35—11:00	Rest	2:15—2:40
11:00—11:30	Singing Rhythms Outdoor play	2:40—3:05
11:30—12:00	Story time Conversation Getting ready to leave	3:05—3:30

3. Kindergartens where children remain all day.

9:00—9:30	Opening Roll call Planning
9:30—10:10	Work-play period Cleanup Evaluation
10:10—10:20	Toileting Washing hands
10:20—10:30	Juice
10:30—10:45	Rest
10:45—11:15	Outdoor play
11:15—12:00	Story hour Getting ready for lunch

12:00—12:45	Lunch
12:45—1:00	Toileting
	Getting ready for rest
1:00—2:00	Rest
2:00—2:30	Putting away cots
	Milk and crackers
2:30—3:00	Singing
	Rhythms
3:00—3:30	Outdoor play

In colder areas, where dressing for activities out of doors takes time, outdoor play should probably be scheduled at the end of the day, just before children go home. If the same room is used for both lunch and rest, and the teacher has an assistant, children may be sent outdoors while dishes and other luncheon equipment are being removed. All other time allotments are suggested only; teachers will need to make adaptations to suit their own circumstances.

Planning for kindergarten activities should probably be done on a weekly basis, to ensure a variety of activities for all children. Some teachers feel inadequate in music or art and may tend to give these areas insufficient attention unless they make very specific plans. Teachers who are proficient in these fields may tend to overemphasize them in the program.

The First Day of School

Seldom if ever is it possible to use the regular schedule on the first day of school. If children have had an opportunity to visit the kindergarten before officially enrolling and to experience some of its satisfactions, their first experience with the group may not be so formidable. But if everything is new to the children, the teacher must be very understanding. Some children may become frightened if the teacher appears harried or tense. Good planning can help the teacher to be calm, patient, and friendly. Although not all materials and equipment will be used during

the first few days, she should select and make available a variety of toys, puzzles, blocks, crayons, paper, story books, and doll-play equipment to make the kindergarten room as attractive and inviting as possible to children.

In some schools children come in small groups—perhaps four the first day, five more the second, and so on—until the entire group is assembled. This arrangement enables teachers to become better acquainted with children and to give them help where it is needed. And children seem to adjust to the group situation more easily if they are not overwhelmed all at once by large numbers of other children. Kindergartners should be preregistered if possible so that the child and the teacher, as well as the parent and the teacher, can have an opportunity to become acquainted. Knowing something in advance about the group will help the teacher to make adjustments for them. If registration is done on the first day of school, it should be handled in some place other than the kindergarten. Teachers need all their time for children on opening day.

As children arrive, they are shown where to keep sweaters and coats and where they may store any treasures they bring to share with the class. The teacher then helps the children to become interested in some activity, making sure that they have time enough to look at all the "wares" the kindergarten has to offer. Some children may not be quite ready to participate and may prefer to remain on the fringe of things for a few days. The teacher should encourage all children to participate, but never in such a way that they become frightened or concerned about their inability to do so.

Although cleaning up is important, this routine cannot be established the first day. However, children should be encouraged to return materials and equipment to the proper place and should be introduced to the procedures used to prepare the kindergarten for the next activity.

It may not be possible to establish the routine of lunch for several days, particularly if money must be collected from

parents. Because resting may be associated with some unpleasantness at home, it may be best to dispense with a regular rest period until children become accustomed to the kindergarten. For the first few days, children can relax quietly at tables with their heads down when they show signs of becoming overstimulated.

Most children will respond to music and rhythms even on the first day. Teaching the child a short song may help to give him a feeling of really having learned something at school. Story time is usually an enjoyable way of ending the session. The teacher, however, must be especially careful to select a story which is short yet interesting—a story with the kind of action and humor even tense or nervous children will enjoy. Marjorie Flack's "Angus" stories, the familiar "Peter Rabbit," or Lois Lenski's "Little Auto" will probably hold the interest of even first-day kindergartners.

Schools vary in their policy concerning the presence of parents during the first few days of school. In some schools the parent is encouraged to bring the child and then leave immediately. This is suggested in the belief that some children exhibit undesirable behavior only when the parent is present and if left alone can be integrated into the group more readily. Some schools encourage parents to stay a few minutes with the child so that he does not feel abandoned.

There are individual differences among parents as well as children and no one policy can solve all problems. Whether parents leave immediately or remain for a while may have to be determined by a combination of factors—the child in question, the size of the group, the policy of the school—and the parent's own point of view. What works for one parent and one child may not work at all for other parents and other children. Each teacher will have to solve the problem in her own way, within the framework of the school's administrative policy and her own understanding of children and parents.

The size of the group and its general composition will largely

determine the events of the first day. The teacher's goal, of course, is to make this first experience such that children want to return again the next day. Only when children can feel comfortable in the kindergarten—when they are confident that their teacher accepts them—are they ready to move on to whole-hearted participation in a full kindergarten day.

Problems for Discussion

1. Should the kindergarten schedule for a group of children from underprivileged homes differ from that for children from upper-income families? In what respects? What would be your reasons for using similar or different schedules for these two groups?
2. Miss Dowson's policy is to restrict the use of certain materials to the second semester of kindergarten because, she says, children are too immature at the beginning of the year to use them properly and also because she feels that she needs periodic "surprises" in the way of new materials to hold the interest of children throughout the year. How do you react to Miss Dowson's reasoning? Do you agree or disagree with her position? Why?
3. Mrs. Rosen believes that it is "too restrictive" to have a schedule in the kindergarten. If there is a schedule, she feels, teaching lacks "creativity." Miss Ford, however, says that one can teach with a schedule and still have flexibility. With which position do you agree? Why?
4. Your principal has told you that he disapproves of providing a rest period for children on the grounds that "if children are old enough to come to school, they are old enough to dispense with rest periods." How would you answer your principal's reasoning in this situation?
5. How might the schedule of activities in the kindergarten vary in the following situations?
 - a. 25° below zero weather
 - b. All-day rain
 - c. 70° weather
 - d. Many children with colds
 - e. Children just inoculated with Salk vaccine

Suggested Additional Reading

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- What Makes a Good Kindergarten Year?* Report of project presented at A.C.E.I. Conference in Los Angeles, Association for Childhood Education International, April 1957.
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grow farther apart." To attempt to preserve the creativity of childhood by freedom and informality in education is, Rannells³ says, to misunderstand the nature of it. "Creativity in adolescence is a new kind of process, entirely [characterized by] conscious construction" rather than spontaneity.

The Young Child as Artist

In creative expression as in other phases of growth, there are no short cuts. The child needs time to live completely through each stage of artistic development. It is impossible to define specific grade or age expectations in the arts; however, the child can be expected to grow continuously in perception of form and relationships, in motor coordination, and in ability to organize ideas. The child who is developing normally "exhibits a steady progression from 'scrubbing' through experimentation with line and form to representative work. The teacher who works with youngsters in the kindergarten-primary grades can expect to find children in all of these stages."⁴ The teacher of young children who is convinced that all children possess in some degree the power to create will see her role as that of nurturing growth rather than of trying to direct it into some predetermined pattern. Therefore, she must understand how children grow, how they see their world, and how they reorganize and interpret, each in his own way, the experiences which their world offers. She will know, too, that the growth fostered by creative expression is more important than what the child creates.

What the young child draws is part of his own subjective experience; he expresses what is in his mind at the moment. The kindergarten child will draw largest the things which are important to him, giving less attention to, and perhaps omitting entirely,

³ E. W. Rannells, "Aesthetic Expression and Learning," *Journal of Aesthetics and Art Criticism*, 1947, V, 314-320.

⁴ Roma Gans, Celia B. Stendler, and Millie Almy, *Teaching Young Children*, Yonkers, N. Y., World Book, 1952, p. 287.

things which are of little significance in his scheme. According to some authorities,⁸ children are likely to emphasize not only details which interest them but also those which represent "trouble areas." Thus the young child who is having some difficulty learning to button his clothes may adorn the garments of the figures he draws with outsize buttons. The child who is experiencing a great deal of difficulty in adjusting to a new baby in the family may reflect his problem in his painting by drawing the baby very large in proportion to other things in the picture.

The kindergartner nearly always paints pleasant things in gay colors.⁹ He is not inhibited, as most adults are, by the apparent need to reproduce in what he paints the actual color of an object, particularly if his subject is a "happy" thing. Thus a pet puppy might be rendered in red or green and a kitten in bright yellow. This distortion of size and color in the creative work of children often gives excellent insights into aspects of the environment which have special emotional significance to them.

However, not all distortion in children's painting is emotionally significant, and not all teachers are capable of analyzing it. The kindergartner child has simply not lived long enough to understand all parts of his environment in all their interrelationships. Often children's artistic creations omit details which seem essential from the adult point of view—or include some which adults think unnecessary or superfluous. Distances and sizes which appear large to the child often appear quite different to the adult. The world from the vantage point of a four- or five-year-old is not the same world as seen from adult height—a fact which adults all too frequently forget. (We shall have more to say later about the fallacy of applying adult standards to the work of children.)

Then, too, as we have pointed out, young children are unhampered in their self-expression by any felt need to make their

⁸ Ruth Strang, *An Introduction to Child Study*, New York, Macmillan, 1951.

⁹ Lucy Sprague Mitchell, *Our Children and Our Schools*, New York, Simon & Schuster, 1950, p. 41.

pictures reflect reality. Nor does the young child care whether or not his pictures are beautiful. What he wants, as Goodenough puts it, is "to tell what he has in mind. Details do not trouble him; he goes straight for what is to him the main fact. So if he wants to draw a man with trousers on, he draws the man first and adds the trousers afterwards. The fact that the legs show through the trousers does not trouble him a bit. The man is there, so are his trousers, and who could ask for anything more complete? If he wants to draw a little girl picking flowers in a field, he first draws the girl, then the flowers, and extends one of the arms down to the flowers at her feet, in happy disregard of the laws of anatomy."¹

The Teacher's Role: Guidance, not Criticism

Few adults thrive creatively in an atmosphere of criticism. Children, even more than adults, are easily discouraged by unfavorable comments on their attempts at self-expression. The teacher's role is to draw out the creative power each child possesses. This objective can best be attained by sympathizing with the child's efforts, by developing in him confidence in his own ability, and by withholding criticism based on arbitrary judgment of what is "correct" in art. When the child learns that the teacher appreciates his creative efforts he relaxes; he is eager to show her what he has created. "Please come and see my picture" will be heard more often than "I can't do it."

Needless to say, a child should not be given praise for work which is not the result of his best efforts. But no matter how inadequate the creative product, if it represents sincere effort it should be given recognition. This means that the teacher has the responsibility of knowing not only how children in general develop but also how each individual child in the kindergarten is growing in creativity.

¹ Florence L. Goodenough, *Developmental Psychology*, New York, Appleton-Century-Crofts, 1945, p. 405.

The child of kindergarten age is interested mainly in the activity itself rather than in the finished product. The child of three or four paints purely for the pleasure of applying color to paper, with no thought of trying to represent objects or people in his environment or to express a specific feeling. As he matures, his paintings may still appear meaningless to adults, but they come to represent ideas to him—even though he may not decide just what ideas until he completes the picture. Often with the four-year-old, whether he is attempting realistic representation or merely applying pretty colors, the idea evolves as he works. If one should be so unthinking as to ask him what he is painting, he might well reply, "I haven't decided yet."

In the area of the creative arts the imposition of adult standards on the work of children serves only to stifle their natural inventiveness and spontaneity. Lowenfeld exhorts adults not to impose their own conceptions on the child: "All modes of expression but the child's own are foreign to him."⁸

There can be no single standard of achievement in the arts. The process through which a child moves and the product which he creates are, to a great extent, dictated by his developmental level. His way of working cannot be compared with that of another child, much less with that of an adult. The only valid standards of achievement in the art program for young children are those based on the child's own past performance. The child's creativity must be honored and respected if he is to grow naturally in his art experiences. Knowing the child better will help the teacher understand how he expresses himself creatively at each developmental stage.

Lowenfeld⁹ points out that since the child's thinking is different from that of the adult, his expression also will be different. To a five-year-old, a tree is "something undifferentiated, a trunk with something rather indefinite on top." To a ten-year-old, a

⁸ Viktor Lowenfeld, *Creative and Mental Growth*, rev. ed., New York, Macmillan, 1952, p. 3.

⁹ *Ibid.*, pp. 2, 10.

tree is something to climb; to the sixteen-year-old, it is part of the environment with which he is intimately acquainted. As the child matures, his "subjective relationships" to the tree change. The subject matter—the tree—has remained the same, but it is seen differently, depending on the developmental level of the child. For this reason, it is undesirable and perhaps even impossible to teach a child how to draw a tree. Even if the teacher tried to do so, the kindergartner would be unable to understand the tree in all its detail and in proper relationship to other aspects of the environment. According to Lowenfeld, it is this discrepancy between how the child expresses himself relative to such things as trees and what the adult thinks is "correct" that causes most of the difficulties in art teaching.

Teaching the Creative Skills

Although she does not attempt to introduce adult standards of performance, the teacher must not be merely a passive student of child development; she needs to help the child to grow. She must know when and how to introduce techniques; she must be an active guide, helping the child to grow in his use and appreciation of art media. The teacher remains in the background, but she is always ready to help the child with his problems of self-expression. She teaches him whenever he shows readiness for new learning compatible with his maturity level—remembering always that "preschool years are not the time to emphasize mastery of the techniques of drawing and painting."¹⁸

Children will need help with technique as they mature in their ability to handle art media. As a rule, the teacher's focus in introducing a specific technique should be on helping the child to reach a goal *set by the child himself*. When the *child* becomes concerned because the field in his picture does not "lie down," for example, it is time for the teacher to introduce techniques

¹⁸ Strang, *op. cit.*, p. 181.

of using color and perspective that will assist him in achieving his purpose. If the *child* is concerned because the horse he is trying to draw looks more like a dog, the teacher may help him to recognize certain physical characteristics, such as leg length, which differentiate the two animals. Or she may help the very young child to keep from constantly dripping color on his picture by showing him how to wipe his brush on the edge of the paint jar.

In guiding the child, the teacher should be aware that any technique which does not help the child to express better what *he* has in mind is of little value to him. She should not "show" the child that the sky should be brought down to the horizon line. The four- or five-year-old is not ready for such understanding; he "knows" that the sky is above him and that there is "air" between it and the ground. The teacher should neither "improve" the child's work nor give him a model to copy. As Cole has stated, the moment the teacher "draws on the board or paints on paper, that moment is the child crippled and inhibited. That moment is he ruined for confidence in his own way of doing. Hands off!"¹¹

The teacher who understands how children grow and learn is aware that it is the child himself who sets his own standards. It is her responsibility to see that these standards are constantly changing, so that as the child matures he becomes eager to express himself at increasingly higher levels, and increasingly capable of doing so. But the important thing is that it is the child who must exercise judgment and set the pace for his own development.

The Creative Environment

The creative power inherent in every child needs an environment that is both stimulating and secure. It should be an environment rich in experiences and materials, in which the child is free

¹¹ Natalie Robinson Cole, *The Arts in the Classroom*, New York, Day, 1949, p. 9.

to create, to investigate, to manipulate. The kindergarten should be a happy place, full of color, warmth, and love, where the child is secure in the knowledge that he has the understanding of his teacher.

Rather than criticizing the child's efforts, guidance by the teacher might better take the form of making sure that materials for self-expression are available, that time is provided, and, above all, that experiences are so arranged that creative expression will be stimulated.

The child should have many materials to work with—not too many, for overabundance only confuses young children, but enough to invite and challenge him—and they should be readily accessible to him. Much of the art experience of the kindergarten child is in the nature of exploring the possibilities of materials with which he is as yet quite unfamiliar. The kindergarten which provides children only with crayons, or only with clay or easel paints, is depriving them of the opportunity to experiment and so to learn. Making three or four art activities and materials available to children stimulates their creativity; a child who is not "inspired" to draw in crayon may find great joy and stimulation in working with clay.

It is not enough to have materials; the child must also have ideas to express. And ideas come from experiences. Trips around the school and the playground, excursions to the zoo, stories, songs—all furnish children with ideas which they can express creatively.

The kindergarten teacher can also help the child to find joy and satisfaction in his creative efforts by mounting and displaying the creative expressions of children. Regardless of his skill, each child should from time to time experience the pleasure and pride that come from having some of his work on display. Pictures done by children can be mounted attractively on dark construction paper, which sets off most effectively the bright colors children love to use. Some teachers make a sort of sculptured frame, with mitered corners, for very special pictures. In addition to giving

children some recognition for their achievement, displays of their products add greatly to the décor of the kindergarten. Children's pictures and sculptures are often charming.

Few adults would find much inspiration surrounded only by artistic creations on their own level of ability. Children, too, need to have experiences with pictures and other art products which they have not created. Displaying photographs or reproductions of paintings or sculptures not only makes the classroom a more attractive place but also helps children to grow in their appreciation of the beautiful. It may also stimulate them to further creative expression. Many teachers maintain a file of good pictures on themes of interest to children. Some of these may become a more or less permanent part of the general scheme of decoration in the kindergarten; others might be posted on a bulletin board and changed periodically.

In choosing art products for display as in every other aspect of the creative arts program, the teacher should avoid imposing her own tastes and predilections on the children. Rare is the five-year-old who can derive pleasure from looking at the "Mona Lisa." The children's interests should be the basis for the teacher's collection of pictures; but pictures of animals and children—themes which children enjoy—can be aesthetically satisfying. They need not be sentimental, "cute," or poorly executed or reproduced. Children can also appreciate so-called abstract art; in fact, they are often capable of enjoying patterns of line and color much more directly and more enthusiastically than adults, because they are not limited by rigid preconceptions of what constitutes "art."

Most kindergarten teachers also post seasonal pictures—pictures of Santa Claus and his helpers in December, Halloween illustrations in October, or pictures of the Easter Bunny in the spring. These decorations are traditional in the kindergarten. Children enjoy looking at illustrations of these subjects as well as creating them; they are spots of color and gaiety in the classroom. And they often inspire children to do art work of their own.

The Materials of Art

As we have pointed out, the teacher not only helps the child to grow to more mature ways of expression, but also introduces him to as many materials as possible through which he can express himself. There is a wide variety of media which even the kindergarten child can handle, and he should have the pleasure of communicating his ideas, feelings, and visual impressions in these many forms of expression.

Because crayoning is not as messy as painting, there may be a tendency to overemphasize crayons in the kindergarten. But they are only one of many media. Objects can be defined sharply in easel paints as well as in crayon—an effect that most children seem to like. Easel painting, according to some investigators,¹² seems to be preferred particularly by children who appear to be working out emotional problems through creative expression—perhaps, in part, because it is very often a solitary activity. Crayoning, on the other hand, can be quite a social affair, accompanied by much interchange of ideas. Pictures done with easel paint, further, have a certain amount of permanence. And although the process of creating may be more important to the kindergarten child than the finished product, he also finds satisfaction in being able to show parents and other children his artistic creation in final form.

Drawing with chalk on either wet or dry paper is interesting to most children if for no other reason than its novelty. Because it is a rather messy activity, few mothers introduce it at home. Very striking effects can be obtained by using wet drawing paper. It tears less easily than easel paper, colors are vivid, and the dry chalk slides easily on the paper. A light coat of fixative will preserve pictures done with chalk.

The young child should also have experience with media that encourage rhythmic movement and unrestrained creativity,

¹² Ilse Forest, *Early Years at School*, New York, McGraw-Hill, 1949.

as well as giving play to larger muscles. The child can manipulate sand, clay, and finger paints pleasurably—and for an infinite length of time—with little concern for the result. On the other hand he may produce effective products with these materials. In working with clay, the child has not only the pleasure of squeezing, squashing, mixing, and rolling, but also the joy that comes from creating something beautiful—and this is emotional satisfaction indeed!

Even if the rhythmic movement and enjoyment of the activity itself are the most important aspects of creating for the young child, he is still learning. Creating with wood may mean much apparently meaningless pounding for the sheer satisfaction of "making the nails go in," with little thought of the need for them to hold something together. But merely by driving nails into wood the child is learning a good deal about the nature of material and how he can manipulate it. So also with other creative media.

Commercially produced finger paints may be prohibitively expensive in communities where funds for the purchase of materials are limited. Many teachers substitute liquid laundry starch, adding a drop or two of food coloring to furnish the colored base. Food coloring is preferred over easel paints for this purpose because some varieties of the latter may be poisonous. When children are painting with their hands, there is greater danger that some of the material may find its way to their mouths than when they are painting with brushes at the easel.

For teachers who prefer a thicker starch mixture than the bottled variety, very satisfactory finger paint can be made from the following recipes (*The last two formulas make a somewhat fluffier and more "slippery" paint.*)

I

12 tablespoons laundry starch
2 quarts boiling water
oil of cloves
vegetable coloring

Dissolve starch in a little warm water. Add boiling water and stir until mixture thickens. Add a drop of oil of cloves to preserve, put mixture into jars, and stir in coloring.

II

½ box laundry starch
1 quart boiling water
½ cup soap flakes
½ cup talcum powder (optional)
vegetable coloring

Mix starch with small amount of water to creamy consistency. Add boiling water and cook to glossy transparency. Cool somewhat and add soap and talcum. Pour into jars and add coloring.

III

½ cup laundry starch
1½ cups boiling water
½ cup soap flakes
1 tablespoon glycerine
vegetable coloring

Mix starch with small amount of water. Add boiling water and cook until thick and glossy. Beat soap flakes in briskly. Cool and add glycerine. Put in jars and add coloring. This finger paint will keep for several days, depending on the temperature of the room. It is preferable, of course, to have fresh paint every day.

Inexpensive shelf paper or glazed butcher's paper make very good substitutes for the commercial finger-painting material, which is rather expensive.

There seems to be some difference of opinion regarding the kind of clay children should work with in the kindergarten. Some teachers prefer plasticene, or clay that has been mixed with oil, to the water-mixed variety, because plasticene never hardens and is consequently less messy than water-mixed clay and can be used over and over again. Despite these advantages, plasticene has one characteristic which seems to be somewhat frustrating to small children. Unless it is stored in a relatively

warm place, it becomes exceedingly stiff and must be softened by manipulation. By the time it has become soft enough to use, many children have tired of the material and so get little pleasure from it other than the manipulation. And even this they find difficult; children's hands are so small that they can manage only very small pieces of this material when it is stiff. Some teachers feel, too, that plasticene may become a carrier of infection since it can be, and usually is, used over and over again for a long period of time. A further disadvantage is that plasticene, because it never hardens, cannot be painted or otherwise decorated. It does, however, come in a variety of colors. Pieces made of water-mixed clay, on the other hand, can be decorated with enamel colors or easel paints. To keep the paint from rubbing off, a thin coat of shellac or varnish should be applied over it.

Lacking both plasticene and water-mixed clay, the kindergarten teacher can make fairly satisfactory modeling material by mixing one cup of flour, three teaspoonfuls of alum, $\frac{1}{2}$ cup of salt, vegetable coloring, and enough water to hold the ingredients together. This "clay" is not so lasting as the commercial variety, but, because it can be made rather gay in color, children sometimes prefer it. Like ordinary water-mixed clay, this home-made material must be kept in an airtight container. Because it contains alum, which is an emetic, the teacher must take care to see that none of it finds its way to children's mouths.

Cutting and pasting are activities which kindergarten children enjoy. Many of them, however, lack the necessary coordination to perform these activities neatly. This does not mean that the activity should not be included in the program; it means merely that, in this area as in others, children need a certain minimum of experience and maturity before they can do a finished piece of work. Some children enjoy cutting up pieces of colored paper to create pictures; others may produce a three-dimensional shape; others may attempt to make masks or scrap-books. Blunt-end scissors are generally provided for young children, but some children seem to need pointed ones to create

what they have in mind. Here also there are great individual differences; many "fours" and "fives" can use sharp scissors safely with very little supervision. Usually girls have more success in these activities than boys, perhaps because of developmental differences and perhaps also because of some differences in experience and cultural expectations. Because girls tend to stay closer to home and are interested in less active things than boys are, they engage to a greater extent in such activities as coloring, cutting, and pasting. And because they have become successful with these activities, they tend to practice them more than do boys.

Building activities in the kindergarten involve dramatic play, physical exercise, and creative expression. Because it can serve so many purposes, constructing with blocks is a very important part of the kindergarten program. The more shapes and sizes of blocks there are, the more possibilities the blocks offer. The blocks should be smooth-surfaced and so designed that the various shapes fit well together.

Sometimes children will build "just for the day." At other times they will wish to preserve the structure so that they can add to it or play with it later. Ideally, there should be sufficient space in the kindergarten so that a structure can be allowed to stand for as long as the children remain interested in it. Should space be at a premium, a sketch of the completed project done by the teacher will help children to rebuild quickly next day.

Teachers differ, sometimes sharply, concerning the desirability of "functional reality" in much that is constructed in the kindergarten. Some teachers maintain that four- and five-year-olds are capable of only imperfect planning and are, therefore, satisfied with imperfect structures and equipment which does not function to any degree like the "real thing." In a kindergarten holding to this philosophy, children build cars, planes, and trains that cannot move because they are constructed of blocks. Such structures may need to be rebuilt almost hourly because the children lack the knowledge and skills necessary

to make what they build bold together. The teacher, however, never interferes by giving suggestions or offering guidance, except when necessary to ensure the safety of children.

The other point of view holds that the teacher should guide children so that what they build actually functions. This approach calls for greater mechanical skill on the part of the teacher than if the children alone are responsible. It also necessitates more detailed planning, as anyone who has had the experience of baking a cake with the "help" of a small child knows well. The kindergarten teacher adhering to this point of view helps children to build cars and trains which have wheels that "go" and which do not constantly collapse. It should be pointed out, however, that many nonfunctioning structures created in the kindergarten bear greater physical resemblance to "real" trains than does the functioning variety.

To the young child, as we have previously pointed out, the process of creating may be more important and more satisfying than the finished product. Yet at least one authority¹³ claims, "Older preschool children and primary pupils desire permanence for their buildings. They also want a fairly finished product: a house they can get into, a wagon that can be pulled, a boat that can be used for a time as a center for dramatic play." She adds, "Success in terms of the product is a standard all can appreciate and accept—building a chair you can sit on, a doll's house you can play with, making a cowboy hat you can wear, building with floor blocks a house that doesn't fall down when it is played in—these are achievements of which five is justly proud."¹⁴

Perhaps there is room for both points of view. At times it may be the process of constructing that is important rather than the finished product. But if the child at five is to accomplish the results listed above, he needs some help from the teacher.

Papier mâché may be a difficult medium for very young chil-

¹³ *Ibid.*, p. 105.

¹⁴ *Ibid.*, p. 59.

dren to handle, but it can prove very stimulating and satisfying to children who are capable of working with it. It is also one of the least expensive art materials available for children since it consists merely of paper toweling or newspaper torn into strips (tearing gives better results than cutting) and mixed with liquid starch. The strips should be soaked in water overnight. Drain and squeeze out all water the next day, mix the pulpy water-soaked paper with enough boiled-starch solution to make it of modeling consistency, squeeze out the excess starch, and the children are ready to go to work.

Kindergartners cannot make elaborate figures out of papier mâché, but they are quite capable of modeling fruit or even simple "creatures." Winding strips of paper dipped in the starch solution around the legs and other appendages will reinforce them. When dry, figures made from this material can be painted with water colors or oil paints. The teacher should be cautioned not to permit children to attempt difficult things in this medium, or she will be faced with the problem of doing all the "creating" herself. If papier mâché is too difficult for the children to manage, it is best to try an easier medium of expression.

This last statement applies also to much of the sewing or weaving that is done in kindergartens. A few children may be sufficiently mature to manage these two crafts, but most kindergartners have neither the eye-hand coordination nor the patience necessary for weaving and sewing. Immediately after Christmas there often appears in the kindergarten a rash of various kinds of sewing materials which have been given to little girls as gifts. Very little that is productive results from such "sewing sets"—and very little that is enjoyable, either. Sewing and weaving are not for the majority of kindergarten-age children; they can express themselves much more easily and with much more pleasure in other media.

Most children delight in making puppets. Complicated stringed marionettes are much too difficult for young children to make or to manipulate, but even kindergartners can create

simple hand puppets of stuffed paper bags or stockings, adding appendages for arms, and painting faces on them. They can even add hair and dress the puppets up to some extent.

The very simplest kind of puppet is the stick puppet, which is nothing more than a picture of a person or animal, cut from a magazine or drawn by the child, and attached to a tongue depressor, manicuring tool, or other stick. Stick puppets are easily managed by the child and are as satisfactory for his purposes as the more elaborate puppets and marionettes.

The kindergarten child as a rule is not very critical of his own performances and so is not hesitant to express himself in dramatic play. But there may be some children who need to hide behind a puppet face in order to experience the fun of puppetry without self-consciousness. Like dramatic play in general, play with puppets gives the fearful or troubled child an opportunity to express and release his apprehensions and tensions. It can also be of great value in developing children's ability to handle language.

Because the four- or five-year-old child has not matured sufficiently to use the smaller muscles, all art work in the kindergarten should be of the type that encourages the child to use large sweeping strokes. Paper for crayoning should be large to discourage the tight and inhibited expression characteristic of so many children. The choice of what materials to use and when to introduce them should be based on observation and understanding of the needs of the children. There are limitations peculiar to each of the media, and the teacher's experience with them will help her to determine how and when she introduces them to children. Different materials mean different things to individual children, and this the teacher should recognize and accept. Most children find delight in using finger paints or clay, for example, but some children (most often girls) come into the kindergarten unable to thoroughly enjoy these materials, usually because their mothers have overemphasized the need to stay clean. Such children may remain on

the fringe of the activities for quite some time before they can bring themselves to work with these materials. Teachers need to assure these children that their clothing will be protected and that they will not be punished for accidents. Such assurance may help them to overcome their initial fears and enable them to work with clay and finger paints. The greater the variety of materials the teacher offers, the more likely it is that each child will find a medium through which he can express himself readily and enjoyably.

Taking Care of Clothes and Equipment

A necessary part of work with paint and clay is the protection of clothing. Children should not engage in such activities as finger painting or easel painting without wearing an apron, smock, or some other covering. A discarded man's shirt, buttoned down the back and with the sleeves cut short, affords very adequate protection for messy work. Teaching children the importance of protecting their clothing is not only a valuable lesson in the care of property but a contribution to better home-school relationships; few parents feel kindly toward the teacher who permits their child to get paint spots on his clothing. Many a kindergarten teacher has jeopardized good relationships with parents by her lack of foresight concerning this problem.

Equally important is the care of school property. The teacher should see that there is an adequate supply of newspapers to protect table tops or other flat surfaces on which children are working. Equipment and materials should be stored in places that can be reached by a four- or five-year-old. Not all children come to school with the same standards of order, but all children can at least begin to appreciate an orderly room and the need for returning things to their proper places. From the point of view of safety alone it is important that children be taught to pick up things when they are finished with their work or play. Care of materials is a co-operative enterprise in which

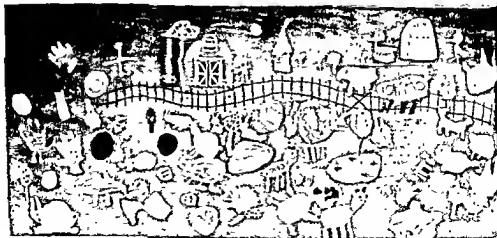


Kindergartners should have the opportunity to express themselves in a variety of media. Most children enjoy manipulating clay. If the finished product is a work of art, so much the better! Easel painting is also a popular activity. No special equipment is necessary, father's discarded shirt protects clothes as effectively as a child-sized smock or apron, and an up-ended chair can serve as an easel. An overfastidious child may not enjoy finger painting—for reasons readily apparent in the picture below. But most other children, provided that their clothing is well protected, approach the activity with delight.





Woodworking need not be restricted to boys; nor is it necessarily an indoor activity. The children in the picture above are decorating the results of their carpentry with easel paint. Coloring and cutting on the lines may be difficult for some four- and five-year-olds, particularly boys, for at this age girls appear to excel boys in muscular coordination. Note that the child in the picture above is using blunt-end scissors. After his skill in handling such hazardous tools has increased, his teacher may permit him to use pointed shears for especially exacting projects. The co-operative effort represented by the mural reproduced below is within the capacity of many kindergartners. Each animal and tree in the mural was contributed by a different child.



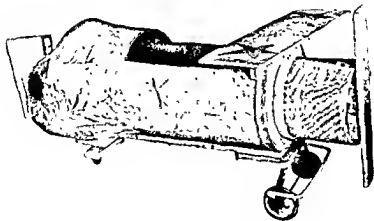


Two important parts of the creative-arts program—evaluation period and cleanup time.





To children, the process of creating may be more important than the finished product. Yet, in construction activities, many educators believe that the children should have the teacher's guidance in order to create a structure that will actually function. The children in the picture above have had the fun of building an airplane of blocks, but once built, it will not "fly." The plane shown below, built with the teacher's help, has wheels so that the "pilot" can make it move





Music plays an important part in the lives of kindergartners. They enjoy participating in such "formal" activities as the rhythm band shown above, and they also enjoy experimenting informally with many different sources of music, among them small instruments of the sort shown below. The modern kindergarten provides many opportunities for children to learn to listen to music as well as to create it. A phonograph is essential equipment, for children seem to like operating the machine almost as much as listening to the music it produces.





Kindergartners are not formally taught to read, but they have many experiences which help to prepare them for the first-grade reading program. Listening to the teacher read a story is a highly pleasurable experience—but the children in the picture above are also looking forward to the day when they can read stories for themselves. "Story hour" has taught them to respect the world of books. Working with puzzles builds reading readiness in another way; it helps children learn to perceive likenesses and differences in shapes and improves eye-hand coordination—both prerequisites to reading.





Children in the kindergarten also meet books "face to face." In the picture above, a kindergarten teacher is "reading" to other children by telling them stories based on the illustrations in her book. The boys in the picture below are getting acquainted with books in the pleasant surroundings of the library corner





"Show-and-tell time" can help children learn to express themselves to others. The child in the picture above is using the flannel board to illustrate the story the teacher is telling, sounding each word as she puts its symbol on the board. The children are thus learning to associate words with familiar objects and so to extend their vocabularies. Because the child in the picture below is somewhat shy, her teacher has encouraged her to bring a favorite toy to class, to give her both confidence and something to talk about.



the teacher plays an important role but does not do all the work. Learning to assume this responsibility is an important aspect of a child's education, but the teacher of young children realizes that they need much encouragement if they are to stick to the job and therefore takes great pains to commend a job well done.

Sometimes the ingenuity of even the most resourceful teacher is heavily taxed to find space for storage of art materials and the products of children's creative efforts. Ideally, there should be locker or cupboard space for every child, but many kindergartens lack these facilities. Cabinets of a sort can be made from orange crates. They provide at least makeshift storage space which helps to keep the kindergarten room more orderly than it would be otherwise. Finger paintings and other pictures done on a wet surface are especially difficult to care for. A stout string stretched across the room above the heads of the children provides a line from which these paintings can be hung up to dry, secured by clothespins. Fortunately, most of the creative accomplishments of children are finished in the course of one day, and not all children wish to preserve every product. The problem can be lessened somewhat by having the children take some things home or, in the case of plasticene, by returning the material to the jar.

Problems for Discussion

1. Mrs. Powell is disturbed about some of the paintings that her kindergartners produce. "Their houses," says she, "don't look like houses. And today John painted a blue horse! Who ever heard of a blue horse?" How would you reassure Mrs. Powell?
2. In her kindergarten Mrs. Perkins has often given "lessons" in art. These lessons, she says, help children learn to take directions and therefore are valuable experiences. Do you agree with Mrs. Perkins? Explain your answer.
3. What is the meaning of the statement, "Growth fostered by creative expression is more important than any end product"? Is this

equally true for kindergartners and older children? For kindergartners and adults?

4. The kindergarten teacher in school A says she thinks it necessary to show children how to draw certain things—a house, for example—because there is no need for children to learn to draw “incorrectly,” as she feels most four- and five-year-olds do. The kindergarten teacher in school B disagrees. Assume that you are the teacher in school B. How would you support your position?
5. What kind of sewing might be done in the kindergarten by more mature children?
6. Discuss the relation of experience to the creative arts.
7. If you had a child in your kindergarten who was afraid to finger paint for fear of getting dirty, how would you go about solving the problem? Would you talk to the mother first or to the child? Why? What would be your next step?

Suggested Additional Reading

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8. Creative Experiences in Music and Dramatic Play

Just as virtually all young children seek to express themselves in graphic form, so also they respond to sounds and rhythm. The impulse to express oneself in some form of music seems to be as old as the human species itself. Of all the arts, it is the first which can be enjoyed; it is a source of pleasure even in infancy. Some authorities go so far as to say that every normal child has a "natural interest in rhythm and musical tone."¹ Music affords so much joy to the young that it should be a vital part of their life.

Children, of course, differ in musical talent. H. G. Seashore,² one of the best-known investigators of musical talent, says, "musical performance, like all other acts of skill involving unusually high capacity, is limited by certain inherent and inherited motor capacities." Other capacities basic to musical ability such as senses of pitch, of time, and of intensity he feels are largely in-born and function from early childhood: "After a comparatively early age they do not vary with intelligence, with training or with age except in so far as the exhibition of these capacities is limited by the child's inability to understand or apply himself."

¹ R. Squires, *Introduction to Music Education*, New York, Ronald, 1952, p. 47.

² Quoted in Marian Breckenridge and E. Lee Vincent, *Child Development*, Philadelphia, Saunders, 1943, p. 363.

Nevertheless, experiences in music should be available to all children, not merely to the highly talented few. All children can learn to value and to enjoy music, whether or not they have especial aptitude for it. It is the business of the school, and particularly of the kindergarten, to offer opportunities for children to participate in as many musical experiences as possible and to make available as many sources of music as possible—musical clocks, a phonograph, chimes and bells of all kinds, a canary, and a music box as well as conventional musical instruments. Children need to experiment with sounds—the sound of wood striking against wood or metal against metal, the sounds made by a plucked violin string or by a flute, and the sounds made by the human voice. One of the most effective ways of making children aware of music is to call their attention to the differences in tonal qualities among these various sources of sound. The modern child is constantly exposed to music—on the radio, on television, on records, and in special concert performances of music for children. The school can take advantage of the child's many experiences with music outside the classroom to make the music period one of the most enjoyable and profitable of the day.

This does not mean that musical experiences should be restricted to a single period of the day's schedule. Young children sing intermittently all day long. They sing about their play, washing their hands, going to bed, getting dressed—in fact, about everything they do. It seems as natural for children to tell about what they are doing by singing as in any other way. But special attention should be given to music as part of the school program for young children. Music activities can give children emotional release as well as much joy. The experience of expressing their feelings through singing or rhythmic activity, added to the pleasure of listening to music, can contribute greatly to emotional stability and social well-being.²

² *Teacher's Guide to Education in Early Childhood*, Sacramento, Calif., State Department of Education, 1958.

Teaching Singing Skills and Songs

Perfection of technique is not the aim in the kindergarten—in music any more than in art or in any other area. It is far more important to give the child pleasure through musical expression than to insist on correct performance. Yet, unless he is reasonably well satisfied with his performance, the child derives little enjoyment from the activity. The teacher, therefore, tries to help children who are lacking somewhat in the ability to inflect their voices or who have difficulty in matching tones—but she does so unobtrusively.

Although children differ in the quality of their singing, Sheehy⁴ and other authorities claim that there may be no such thing as a monotone. Music should be for all children; every child, regardless of his ability or inability to carry a tune, should be encouraged to sing. Often in play a child raises his voice; the teacher can use such occasions to help him learn to hear differences in pitch. If the child has been calling to another child, the teacher may repeat what he has said, using the same pitch, and then ask him to say it again with her. If the child appears to enjoy this "game" she can encourage him to match lower or higher tones. After a few experiences of this nature, even an apparent monotone should be able to sing simple songs.

Although there should be little emphasis in the kindergarten on singing techniques, all songs should be accurately and clearly presented by the teacher. The teacher who has a light, pleasant singing voice and who knows many short, simple songs has a valuable asset. Children like to have the teacher sing to them, and it is easier and more enjoyable for them to learn a new song by matching their voices to another voice than by matching voices to a piano or other instrument. If the kindergarten teacher can sing without too much help from the piano she should do so. If she feels the need of the piano to support her voice, she

⁴ Emma D. Sheehy, *There's Music in Children*, New York, Holt, 1946, p. 65.

should play only the *melody*, not the *harmony*, until children know the song well.

Songs are intended to be sung, not talked about; too much preliminary discussion detracts from the children's enjoyment rather than enhancing it. The teacher should introduce the song with only a few words, perhaps giving the name of it and telling briefly what it is about. Then she should sing the song for the children from beginning to end. Many children will join in even before they have heard the song in its entirety. After they have participated for a little while, they will be more willing to listen to the teacher sing the song several times so that they can learn it. The teacher will rarely have to sing completely by herself; a few children, who learn more quickly than the others, will almost always be eager to sing with her.

Once the children are familiar with the *melody*, it may be wise for the teacher to speak some of the words to make sure that the children have heard them *distinctly* and understand them. (We can all cite children's garbled versions of familiar songs; for example, the child's version of "Nearer, My God, to Thee"—"Nero, My Dog, Has Fleas.") At times the group may even need to discuss some of the words. If very much discussion is needed, however, the teacher may be attempting to teach children concepts beyond their understanding.

When a new song is added to the class repertoire, it should be sung by the children almost daily for several days. Thereafter it should be repeated from time to time so that the group does not forget it. Sometimes bringing out a familiar song can become an occasion. A rainy day is an opportune time to review a "rain song" that children have enjoyed particularly or to learn a new one. If a child brings a pet to school, the group might sing a familiar song about bunnies or dogs or cats.

Children also create their own music, with their voices and on instruments—the piano, chimes, bells, even tuned water glasses. While they are working or playing, they may sing in rhythm to what they are doing. The kindergarten teacher should

have sufficient background in music to be able to capture on paper some of the tunes created by children. During the "sharing time," individual children who have created songs might be encouraged to sing them to the rest of the group or even to teach them to the other children. Sometimes children who have had a common experience may want to create a song about it as a group. After a train trip, for example, the group may learn some songs about trains and then, as a result, show interest in creating a song themselves about their train experience. The children discuss what they wish to say in the song, the teacher writes down the ideas, and then individual children create "tunes" for the ideas suggested.

Selecting Music for the Kindergarten

In choosing songs to teach to children, the teacher should consider the music as well as the words. Many teachers tend to select songs mainly on the basis of the verse, with little regard for the quality of the music. Yet children's response to music is primarily a rhythmic one. To many children, melody is the most appealing aspect of a song, and they find their greatest pleasure in singing or humming the tune. To other—perhaps most—children, the rhythm of the music constitutes its chief appeal, and their greatest pleasure lies in responding to music through bodily movement or playing rhythm instruments. If the only appeal of a song is its content, there is little justification for including it in the kindergarten repertoire, for there are many songs appropriate to young children which combine lifting melody and contagious rhythm with verses that children like.

Teachers do not need to restrict their choice to the song books issued specifically for children. The folk songs that are part of our musical heritage have survived through the years because they appeal to music lovers of every age and level of musical sophistication. Mozart, Schubert, and other well-known classical composers wrote many charming and simple songs for chil-

dren. If children are introduced to these songs at an early age, and if they hear the songs repeated often enough, they can learn to love "good" music as well as—and, we hope, more than—the tasteless tunes that so often make up the whole of the kindergartner's musical diet. They can even learn to respond to music without words, provided that it has an attractive melody and a strongly accented rhythm; after they had heard her play a simplified version of the "Triumphal March" from *Aida* a number of times, the author found that her kindergartners requested it over and over again. Musical experiences of this sort not only teach children to appreciate fine music and so help to enrich their whole lives but also help them to learn something of the vocabulary of music.

In choosing songs for children to sing, the teacher should also bear in mind the range of children's voices. Research has demonstrated that the "high, sweet voice" which has so often been attributed to children is an exaggeration as far as most children are concerned. Perham⁴ found that the average range of young children's voices is from middle C to high C or D. Jersild and Bienstock⁵ also found that although children's voices are often rather high-pitched in spontaneous play, they sing more successfully if their songs are pitched at a somewhat lower range than the one in which most children's songs are written.

There are also certain requirements of content to be met in selecting songs for young children. First, the song must reflect children's real interests and experiences. Second, it must be simple, expressing a single idea or mood. And third, it should be fairly short. Educators no longer believe that songs for young children should be "full of rosebud babies and personified seasons." Nor should they be full of plot which kindergartners find difficult to follow.

⁴ Beatrice Perham, *Music in the New School*, Chicago, Neil A. Kjos Music Co., 1937, p. 61.

⁵ Arthur T. Jersild and S. F. Bienstock, "A Study of the Development of Children's Ability to Sing," *Journal of Educational Psychology*, October 1934, pp. 481-503.

This does not mean that children should sing *only* songs which are related to their own experiences. In any group of kindergarten children there will be some who, because of home background or other factors, are above the level of most of the group both in appreciation for good music and in ability to sing. These children can share their music with the other kindergartners and thus find an added source of satisfaction.

Although, as we have said, songs for kindergartners should be short, there appears to be little justification for the contention of some kindergarten teachers that young children are capable of learning only one-sentence songs. Even many "fours" can learn relatively long songs if interest in them is high and the words are not too difficult for them to understand. The particular group is, in the last analysis, the "barometer" of what can be done.

Rhythmic Activities

Children like music of all kinds but seem to enjoy especially music to which they can respond with their whole being. There may, in fact, be no such thing as passive listening to music in the kindergarten.

Strang⁷ reports that children develop a sense of rhythm between the ages of two and five. During this time, they learn to keep time to music, to beat in time with their hands, to walk to music, and, after the age of four, to skip to music. Young children appear to be able to follow fast tempos better than slow ones. Children extend and refine their abilities in rhythmic expression as they gain experience and added maturity, progressing from the stage of free bodily movements to the more complex patterns of the dance—or from using simple percussion instruments to accompany themselves to using them to beat out complicated patterns.

⁷ Ruth Strang, *An Introduction to Child Study*, New York, Macmillan, 1951, p. 157.

Bodily movements and rhythmic interpretations are natural accompaniments to all musical activities. Children should be free to interpret the music they hear, but the child rather than the music should determine the response. The impulse to respond rhythmically originates in the child, not in the music. There is no such thing as "airplane music" or "elephant music." Certain rhythms may suggest certain responses, but there is little to justify having the whole group do the same thing at the same time in response to any given musical selection. In fact, Sheehy* has suggested that in the beginning the teacher should make the music keep time with the children rather than have the children keep time with the music. For example, the teacher might improvise simple piano accompaniments for rhythmic patterns created by the children. She might "invent" a song or chant to go with their activity, select and play appropriate recorded music, or use percussion instruments, such as drums, tone blocks, or coconut shells, to beat out the rhythm established by the children themselves. The music should strengthen and clarify the child's own feelings of rhythm; the teacher should help him to express in more controlled and coordinated fashion his own rhythmic patterns. The impulse to dance—to move the body rhythmically to music—is inherent in the child; the teacher need only draw it out by giving him security and freedom to express himself.

In music as in the other arts, the attitude of the teacher is of great importance. Some children find it difficult to release themselves completely in the dance; others are able to translate their feelings into rhythmic movement with great ease and freedom. The kindergarten teacher who understands children will accord each child's own expression in dancing the same respect she gives his paintings and drawings, no matter how crude. A child should never be forced to participate in dance activities. If he does choose to join the group, he should be free to leave

* Sheehy, *op. cit.*, p. 20.

it when he wishes to do so. Here also there are great individual differences. Some children quickly lose interest in dancing; others are able to maintain their interest in this rhythmic movement of their bodies in accompaniment to music for rather long periods of time.

Rhythmic expression may be an outgrowth of virtually any experience. Children may be stimulated by a study trip, dramatic play, a story, a picture book, a film, or music. A child's first response through rhythmic bodily movement may seem limited and incomplete. But "when his tentative beginnings are recognized, valued, and encouraged by the teacher, the child becomes more confident in his efforts to develop rhythmic movements."⁹

Dancing for the young child is not a matter of executing steps "taught" by the teacher. It is, rather, the joyous, spontaneous response of the child's whole body to music. In an atmosphere of freedom the child learns to dance freely and easily; he finds as much opportunity for emotional release in this art form as in the others. And in addition he is developing bodily skill and grace in body carriage.

Listening to Music

In the kindergarten every attempt should be made to help children learn to listen. Not every child, of course, will grow up to be a great singer, instrumentalist, or dancer, but learning to appreciate music will enrich the lives of all children. For developing this appreciation, the phonograph is invaluable. The period between four and six, according to Eisenberg and Krasne,¹⁰ is the "record age." Children of this age not only like to listen to songs on records but they also like to participate, by operating the phonograph, by singing along with the record, by accom-

⁹ *Teacher's Guide to Education in Early Childhood*, *op. cit.*, p. 375.

¹⁰ Philip Eisenberg and Hecky Krasne, *Guide to Children's Records*, New York, Crown, 1948.

panying the song with rhythmic instruments, or by interpreting the "mood" in dance.

Some recordings are well suited to rhythmic activities and still others to dancing or simple pantomime. Children may want to accompany some records with simple percussion instruments. The phonograph, as an extension of the teacher's ability to perform and as a means for teaching children how to listen, can play an important part in the daily music program of the kindergarten.

Playing Instruments

Just as children need to hear music, to dance, to enjoy all manner of rhythmic activities accompanied by music, so also they need to make music, with instruments as well as with their own voices. They may play instruments informally, as part of their individual music activities, or they may wish to make music together by forming a rhythm band. The rhythm band offers not only musical experience but social values as well, for in a rhythm band children learn to co-operate, to subordinate their own desires and impulses to the interest of the group. Although there are few young Mozarts among kindergartners, the kindergarten teacher should be aware that even at this age there is a difference between music and noise. If what comes out of the rhythm band is only noise, perhaps the band is best omitted from the kindergarten program.

It may be advisable to set aside a corner of the kindergarten in which children can experiment with instruments. Such a place should be removed somewhat from noisy activities such as woodworking, so that the children are not distracted, and so that they can hear what they are playing. There ought to be frequent opportunity for young children to experiment with instruments even before they are able to read music. The child speaks long before he can read, and he often creates lovely music long before he is able to distinguish notes in written form. Children should

be discouraged from regarding musical instruments merely as toys to be played with. They should be respected as musical instruments and should not be used roughly.

Homemade Instruments

If the kindergarten cannot afford to purchase instruments, teacher and children together can make a number of satisfactory substitutes from waste materials. Toy instruments are almost useless, for they are incapable of producing more than noise and will not withstand handling by many children.

Drums are perhaps the easiest musical instruments to make. Kegs, cheese boxes, wooden mixing bowls, oatmeal boxes, large cans, or even coconut shells can be used for the body of the drum. The drum heads can be made from any animal skin of sufficient strength, from cloth pulled tightly and shellacked, or from rubber inner tubes. If skin or cloth is used, it should be wet before it is fastened to ensure a tighter drum head. Tacks should be used to fasten the head to the body of the drum if possible. If the drum has a cardboard or metal body, strong cord can be tied around the head to secure it or heads on the top and bottom can be laced together. A small spool padded with cloth and fastened to the end of a stick makes an efficient drum stick. Children can decorate the drums to suit their fancy.

Many other simple percussion instruments can be made from various inexpensive or waste materials. A series of bottles filled to varying levels with water can make a tuned scale. (The higher the water level, the higher the pitch.) A long-necked bottle is generally most satisfactory, but water glasses or other containers can be used in similar manner. The bottles should be suspended by a string so that they hang straight, with the bottoms on an even level. A string placed along the bottoms will prevent bottles from swinging too freely. If clear glass is used, the children may wish to put a few drops of color into the water.

Flower pots of various sizes suspended from a bar, bottom

side up, will also produce tones of different pitch. The hole in the bottom of the flower pot will accommodate the suspending string to which a small stick slightly longer than the diameter of the hole is tied.

Gourds make effective maracas. Soak the gourd, scrub it with steel wool, and dry it before using. Remove the seeds and put rice, small stones, or large seeds inside the gourd; then cover the hole with adhesive tape. Shakers can be made from small boxes containing seeds or pebbles with a stick put through the box for a handle. Both gourds and boxes can be painted by the children to add interest.

Tambourines can be made by attaching bells to shellacked paper plates, or, for a sharper tone, by fastening small bells or pop-bottle caps to a tin lid.

A silver fork suspended on a string substitutes for a triangle and pan covers or old copper or brass bowls make usable cymbals.

Old chair rungs or discarded brush or broom handles can be used as rhythm sticks. Sand blocks can be made simply by covering one side of a block with sandpaper and attaching a spool for a handle.

Dramatic Play

Dramatic and imaginative play is an integral part of the child's free-play activities. But it is also closely allied to the creative arts.

Dramatic play offers the child an opportunity for free expression, enabling him to project himself into a role far removed from the everyday life of his circumscribed world. On one occasion, the child may be Superman; on another, a father or mother; on another, the engineer on a train. When he assumes such a role, the child is not pretending; he is an engineer! In thus becoming another character, he learns about his environment and clarifies concepts about how things in his world are related to him. Every time the child dramatizes life around him he is learning some-

thing about it, if only through imitation. The child identifies himself with his immediate world; he becomes what he pretends to be and he lives the role he has assumed.

Playing through his experiences not only helps the child to understand them but may reveal to the teacher some of the child's misconceptions and problems. Observation of children as they assume the roles of family members will give the perceptive adult much insight into the child's feelings about his own father and mother. Through such observations, for example, the teacher may discover how children are disciplined at home, for children often re-enact in their play the disciplinary measures practiced by their parents. The teacher may also see mirrored in the child's dramatic play his fears, fantasies, and conflicts. Playing out one's fears somehow makes them less fearful, and sometimes the child is able to release emotional tension through dramatic play.

Sometimes the dramatic play is nothing more than a short, spontaneous expression. At other times it may be a quite complex activity in which children assign themselves roles and make up dialogue as the play progresses. Dramatic play may be the outgrowth of common experiences or of stories read to the group. Imaginative play may take place during any part of the day, but informal periods lend themselves to it more than periods when children are engaged in organized activity.

Imaginative play can be encouraged by providing a free environment in which the child has ready access to a few properties, such as dolls, large boxes, a playhouse corner, large blocks, and perhaps a simple collection of costumes or discarded adult clothing in which he can dress up. The kindergarten child requires little equipment; what he lacks in material he supplies through his imagination. More important than properties are experiences on which the child can base his imaginative play. His everyday experiences are the raw material from which he garners material to build; the richer his experiences are, the greater will be the store of ideas from which he can draw. The child who has many experiences with the real world will be able

to build a richer imaginative life. There are probably few human spectacles that come to the senses of the young child which we do not find him imitating in his play.

Dramatic play should be the outgrowth of the child's activities and the expression of his reactions to them; it should not be considered a show. The efforts of young children in this direction should not be laughed at—dramatization is serious business to them and should be so respected by adults. Kindergarten children should not be invited to put on a formal program or exhibition of dramatic play; rather, they should be given opportunity for such dramatization within their own group. If, however, they feel that they would like to show the rest of the school or their parents how they play, small audiences may be invited to see what the kindergartners are doing. They should not be invited to see a show.

Techniques in the Creative Arts: Summary

In the entire program of creative activities for the young child, technique and product are secondary to the child's pleasure and satisfaction in creating. The important thing is for children to have ideas to express creatively and the time and facilities to do so. When they themselves feel the need for new techniques and skills in order to achieve a particular goal of their own choosing, they will express their own readiness, and the new learning will be acquired most efficiently. This is quite different from the philosophy of teaching skills and techniques to all children at the same time in the vague hope that children will retain the information for future use when the need arises. In those very fields which draw on the greatest creativity—art, music, and dramatization—we have in the past emphasized mastery of technique as a prerequisite to creative work. This would seem to reverse the learning process and defeat the very aims of expression in the creative arts. Technique should be a means to an end, not an end in itself.

Problems for Discussion

1. Why is it important for children to learn to listen?
2. In some communities, because of certain convictions of adults, children are not permitted to dance. How would you handle a situation of this kind in your kindergarten?
3. Observe two kindergarten groups to see how much music comes into their work or play. Can you determine whether the attitude of the teacher has any bearing on the amount of spontaneous singing children do?
4. Assume that you are teaching in a kindergarten in which the children appear to be on the whole rather "repressed." What kind of music program would help "release" such children?
5. Why are experiences of greater importance than properties in the dramatic play of kindergarten children? Is this true of adults? Why?
6. Does the maturation process itself have some effect on the apparent unwillingness of older children to dramatize or dance with the spontaneity of kindergarten children? Explain.

Suggested Additional Reading

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9. Experiences in Language

From a completely nonsocial being, unable to utter or to understand a single word, the child becomes in only four years a highly socialized individual, with some 1,500 words, according to conservative estimates, in his speaking vocabulary. By the age of six, the "average" child uses approximately 2,500 words in speaking and can understand perhaps ten times as many. And this represents only a small fraction of the words he will ultimately know.¹

For all his vocabulary, however, the kindergarten child is only beginning to develop the art of conversation. At the age of five, speech is still egocentric; the language of the child at this age contains more references to "I," "me," and "mine" than to "you" and "yours," or "we" and "ours." The young child sees the world as revolving around himself. Averill suggests that the child's lack of facility in conversation may stem from the fact that "he comprehends only dimly as yet either the rights and privileges, or the feelings and values of other people. Experience is vivid for him only as it impinges upon himself. . . . The capacity to think in terms of the other fellow, or abstractly in terms of what is equitable or right, evolves slowly; indeed, by the time of school

¹ See, *inter alia*, M. K. Smith, "Measurement of the Size of General English Vocabulary Through the Elementary Grades and High School," *Genetic Psychology Monographs*, 1941, XXIV.

these older twins also lagged behind singletons in language development. By the age of nine and a half, twins from the upper socioeconomic groups had virtually overcome their handicap. However, those from the lower occupational groups were still inferior in language development.¹

How much of this lag in language development among children of multiple birth is due to hereditary or congenital factors is not known. Certainly much of it can be traced to environmental factors. Because twins provide each other with adequate companionship, they tend not to seek other playmates in their age group and therefore receive less stimulation from the outside than singletons and only children. They are able to communicate with each other—often in fewer words than would be necessary to express themselves to others—and so have relatively little incentive to communicate with others.²

Intelligence also seems to be an important factor in developing language ability. Not only does the less intelligent child tend to have a smaller vocabulary than other children, but his sentence structure may be inferior. Lagging behind other children, he may lack the incentive to improve; the reason he is not interested in language may be that he cannot manage it well.

The causal aspect of the relationship between language ability and mental ability, however, has not been determined, since results on the standard intelligence tests used to measure the latter factor depend so heavily on the understanding and use of words. The question is whether the child earns a good score on a verbal-intelligence test because he has a good command of language, or whether he has a good command of language because he has good intelligence. We have as yet no conclusive answer to this question.

The kindergarten teacher must be on guard against the

¹ E. A. Davis, *The Development of Linguistic Skills in Twins, Singletons with Siblings, and Only Children from Age Five to Ten Years*, Institute of Child Welfare Monograph Series No. 14, Minneapolis, University of Minnesota Press, 1937.

² Jersild, *op. cit.*, p. 418.

temptation to assume that a child who lacks facility in oral communication is mentally retarded. Facility with language is the product of many opportunities to hear and to use words. Children who have had little association with adults or who come from foreign-speaking homes may enter the kindergarten with very few English words at their command. These children will need many experiences and much encouragement on the part of the teacher before they are able to express themselves. Some of these children may spend the entire year in the kindergarten without saying more than a very few words. Some will leave at the end of the year without having said even one word! This may be true as well of children from linguistically starved homes, where they have had little stimulation in the use of language.

Each child must start from "where he is" before he can proceed to the next stage in his language development. Children who come from meager backgrounds may need to be given special help. Most children have an experiential "bank account" from which they can draw in expressing themselves, but for some it must be provided. Increasing the play materials and thereby the sensory experiences of children may help to increase both their vocabularies and their urge for expression.

Development of the ability to express himself linguistically is an essential part of the child's growth as a socialized individual. It both reflects and affects his understanding of all that he sees and hears and his need and ability to communicate with others. Thus it determines the kind of social participation open to him. In fact, the alert teacher observes in children's speech many indications of their social adjustment. With increased command of language comes increased ability to understand and handle difficult situations demanding talking. And with this comes increased self-confidence and independence. Obviously an asset of such value should be encouraged. For this reason the activities of the kindergarten are so designed that four- and five-year-olds are given many opportunities to talk, to listen, and to be heard—and many rich and varied experiences to talk about. Language and

thought develop best in an atmosphere in which the child is free to manipulate and explore things, to talk about what he experiences, and to indulge in "verbal play."

Developing Correct Speech

Many children at kindergarten entrance are not yet capable of enunciating certain sounds accurately. It has been estimated, in fact, that stuttering occurs in approximately ten out of every thousand children.⁹ Among very young children, stuttering may be merely a stage in speech development, and therefore essentially normal. The complicated lip-tongue sounds *f*, *v*, *l*, *r*, *s*, *z*, *ch*, *sh*, and *j* appear much later than the labials *p*, *b*, and *m*, which are the first to be mastered, and children who are not sufficiently mature to produce these more difficult sounds may stutter.

Sometimes the condition seems to be acquired by imitation: one stuttering child in a class may start a mild epidemic of stuttering. Sometimes a child may be shocked or alarmed into stuttering. Stuttering, Strang points out, "also appears to be associated with emotional tension and disturbance, such as fear and feelings of inferiority, inadequacy, or insecurity. It occurs more frequently among mentally retarded than among normal children and is four to five times as prevalent among boys as among girls."¹⁰

Stuttering also seems to occur more frequently "when the child is talking about something concerning which he has insufficient knowledge, when his vocabulary lacks the necessary words, when the listener does not respond readily, when he is talking in the face of competition, and when he is experiencing shame and guilt, particularly if this be the result of disapproval of his speaking rights or ability."¹¹

⁹ Strang, *op. cit.*, p. 435.

¹⁰ *Loc. cit.*

¹¹ *Early Childhood Education, Forty-sixth Yearbook*, Chicago, National Society for the Study of Education, University of Chicago Press, 1947, II, 201-02.

The child's feeling about his stuttering is of major importance in overcoming the condition. If he thinks of himself as abnormal, the symptoms will be accentuated. Any method that relieves his tension about stuttering and gives him greater emotional security may result in more effective control of speech.

Another common characteristic of the speech of young children is lisping, baby talk, or "cute" expressions—particularly among middle-class children. The teacher may enjoy these expressions, but she knows that it is not her business to enjoy them at the child's expense. Babyish speech is undesirable simply because it is an infantile way of behaving, and should be discarded along with other babyish ways as the child grows older. Moreover, as Ilse Forest¹² points out, persistent baby talk may take on the proportions of a speech defect.

At best it is a source of embarrassment to the child when he reaches the mature age of five or six. Without being pedantic, the trained adults in a nursery school try to teach correct enunciation and pronunciation from the very start, using simple and correct language when conversing with the children, and helping individuals gradually to increase their vocabularies by the addition of useful words. The competent nursery-school teacher also restrains herself from talking too much. . . . [She] tries to combine friendliness and warmth with clarity and brevity of speech, engaging the child in conversation only when he seeks to converse, and falling in with his conversation rather than intruding a theme of her own.

Correction of speech defects and language inadequacies should begin in the kindergarten, but the child should not be made self-conscious about his language faults. Nicety of expression should not be achieved at the expense of the child's security or spontaneity in speaking. Many of the speech defects of four- and five-year-olds are functional—that is, they have no organic basis. Many are due to nothing more serious than immaturity and will disappear in time. Children who are having difficulty with

¹² Ilse Forest, *Early Years at School*, New York, McGraw-Hill, 1949, p. 220.

speech sounds can be helped through the use of simple verses or other language materials which appeal to their interests. A poem about a whistling tea kettle can help to teach the "ch" sound. The rhymes found in *The Jingle Book*, by Alice L. Wood,¹³ and in *Games and Jingles for Speech Development*, by Sarah Barrows and K. H. Hall,¹⁴ provide a painless medium for improving children's enunciation of difficult sounds.

Most four- and five-year-olds enjoy playing with words and sounds, and the teacher can exploit this natural tendency to improve the child's ability to distinguish among sounds and to enunciate accurately various sound combinations. Young children like to rhyme words. They like to make up and endlessly repeat nonsense syllables. Even at this age they invent words which sometimes are more descriptive and expressive than those found in the dictionary.

Experimenting with sounds is a normal phase of the young child's development and it seems to appeal to his sense of humor. Many kindergarten teachers capitalize on the child's natural interest in words by encouraging him to make up rhymes and songs or by calling his attention to new or interesting words in poems and stories. The books in Hugh Lofting's "Dr. Dolittle" series have delighted generations of young children, partly, at least, because of the ridiculous names of some of the characters: Gub-Gub, the baby pig; Too-Too, the owl; and Dab-Dab, the duck. The poems of Laura Richards are not only examples of first-rate story telling but contain many coined words that children enjoy—"muffin-bird," "rummy-jums," "Glimmering Glog," and "Wiggledywasticums." Perhaps few children can play with words with more joyous confusion than she. Almost every child, whatever his age, enjoys her "Eletelephony":¹⁵

¹³ New York, Dutton, 1940.

¹⁴ Boston, Exposition Press, 1936.

¹⁵ Laura Richards, *Tirra-Lirra: Rhymes Old and New*, Boston, Little, Brown, 1932.

Once there was an elephant
Who tried to use the telephant—
No! No! I mean an elephone
Who tried to use the telephone
(Dear me! I am not certain quite
That even now I've got it right).

Howe'er it was, he got his trunk
Entangled in the teleplunk;
The more he tried to get it free,
The louder buzzed the telephee—
(I fear I'd better drop the song
Of elephop and telephongi).

The teacher can also give the child direct help in developing articulation by introducing such games and exercises as the following:

1. Discover the speech sounds which are defective by making a "sound book." Paste a number of pictures in a book illustrating certain speech sounds, a page for each sound. Choose pictures illustrating the speech sound in initial, medial, and final positions. To illustrate the "k" sound, for example, use a picture of a *cat*, a *monkey*, a *duck*, etc. As the children name the pictures, note their mispronunciations.
2. Help each child with the particular sounds he cannot say. Show him the position of the lips and tongue for the sound. Have him listen to the sound in rhymes and jingles and then practice it in easy, monosyllabic words, such as *key* and *cow*.
3. Have children say a word as slowly as possible, then as quickly as possible. The slow performance will prepare them for later blending sounds in phonetics.
4. Try choral speaking to give confidence to the stammering child.
5. Have children imitate sounds—an airplane, a train, an auto, a clock, a dog, etc.

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¹³ New York, Dutton, 1940.

¹⁴ Boston, Exposition Press, 1936.

¹⁵ Laura Richards, *Tiro-Lirra: Rhymes Old and New*, Boston, Little, Brown, 1932.

6. Play games requiring different types of voice: baby with a tiny voice, mother with a medium voice, father with a big deep voice, etc.
7. Tell or read a story, having children put appropriate objects on the flannel board when they are mentioned in the story, naming each object as they do so.

Developing Spontaneity and Vocabulary

The prime essential for expression is something to say; grammatical accuracy is a secondary consideration. Once we have provided a rich environment that will give the child many experiences to talk about, we strive to develop his spontaneity in expression; that is, the willingness and desire to express himself coupled with facility in doing so. Adults have often in the past so stressed the importance of correct speech that they have stifled much of the child's natural creativity in language. Although they greet each new word of the infant with cries of delight, they often greet the inept handling of language by the young school child with little but critical comment. The child who enjoys language will probably rid himself of most of his errors in time, but few children who dislike it will ever express themselves well, no matter how carefully they are instructed in the rules of usage.

As they advance through school, many children lose the feeling they had at the age of three or four that language is fun; it becomes merely a tool which they use, rather ineptly, for only very practical purposes. It is the rare individual who retains the delight in language with which he began. If we are to help children retain some of their natural joy in verbal expression, we must give less emphasis to correctness and more to spontaneity. The kindergarten teacher can make a special contribution in this area, for she, unlike teachers in the grades, is not expected to teach children grammar or usage and thus can concentrate on developing their freedom and creativity in the use of spoken language.

As his vocabulary grows, the child develops greater satisfaction and self-confidence in his oral expression. The teacher can assist children by entering their conversations, offering friendly comments or suggestions, and much praise. Some children might be encouraged to bring favorite toys from home so that they will have something tangible and familiar to talk about in front of the group.

Using the suggestions listed below can also help the teacher to help the child grow in language abilities:

1. Show the children an interesting picture and encourage them to talk about the subject, gradually increasing the length of their sentences.
2. Classify objects by making a chart of pictures illustrating, for example, fruits, vegetables, furniture, animals, things mother does, things father does, toys, opposites, numbers, colors, etc. Have children name the items.
3. Read a story to children and then have them retell it.
4. Make a game for prepositions. Put an object in, on, under, beside, below, above, behind, a box.
5. Make a game for adverbs. Have children walk quickly, slowly, sadly, quietly, noisily, happily, etc.
6. Make a game for adjectives. Find a number of different balls and have the children bring the blue, red, big, little, striped, smooth, hard, or soft ball, etc. Have them pretend that they are big, little, brave, happy, unhappy, kind, old, young, etc. Have children describe objects, each other, clothes, etc.
7. Make a game for verbs. Walk, run, hop, work, play, etc. Question the children: what can a boy do, a girl, a mother, a father, a dog?

If the child is to develop his language ability fully, he must derive emotional satisfaction from his experiences in communication. Hence these initial experiences with language should be pleasant ones.

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Children should be praised and encouraged when their language gives evidence of imagination, rhythm, and sensitivity to sound. Often the small child's expressions are picturesque, and such creativity can be prolonged and fostered if given adequate appreciation by adults. The kindergarten teacher can help the child to derive increasing satisfaction from language by guiding his attention to desirable expression. She emphasizes the correct way of saying something rather than children's occasional mistakes. If she does find it necessary to correct a child's language, she merely repeats correctly what he has said incorrectly. Most young children will then say it correctly in the pattern set by the teacher.

Many of the errors children make in English may be due to the irregularities of the language itself. Children may actually be more consistent than the rules of grammar. When the young child says that he "eated" an apple or "bitted" a ball, he is, of course, speaking incorrectly, but he is also giving evidence of a good deal of growth. Being able to generalize to the extent of realizing that "-ed" changes a verb to the past tense is a demonstration of real intelligence. Unfortunately, English has many irregular verbs, and the kindergartner does not yet know which verbs are regular and which are not. In appraising children's language usage, teachers should take into account inconsistencies in the language which kindergartners cannot be expected to understand.

Teachers of young children should also be aware that their own speech becomes the pattern for much of the child's language. Therefore, they must always speak correctly and, perhaps just as important, distinctly. Just as the pattern of the teacher's speech is imitated, so are the pitch and timbre of her voice. A teacher who has a raucous voice develops raucous voices in children. The wise teacher lowers her voice to gain attention from children rather than raising it. If she speaks softly but distinctly, soon the children will be quiet and straining to hear; if she tries to shout the children she will soon find that they are trying to shout her.

Developing Good Listening Habits

One of the problems facing the kindergarten teacher is that all the children want to talk at the same time. The child should learn very early in his school career the need for taking turns in conversation—for listening as well as speaking. Because the four- or five-year-old child is rather egocentric, it is difficult for him to wait his turn to report his experiences. The teacher will need considerable skill to guide children in developing the ability to remain quiet when someone else is speaking. It may be necessary to have young children raise their hands for permission to speak. As the group increases in maturity and skill, such a procedure should be eliminated so that the children learn to converse naturally with others. If children are encouraged to build their own standards of behavior in the kindergarten, they become very adept at disciplining one another when interruptions occur. In fact, children are more effective in disciplining their peers than any adult could hope to be.

The child also learns how to listen as the teacher reads stories, as she plays records, or as various children tell about their experiences. "Show-and-tell time" and "sharing time" are good opportunities for teaching children how to be good listeners.

The telling of original stories by the children is as much a part of the story hour as the teacher's reading or telling of stories. Although much of what the child creates may be somewhat crude and formless, he should be encouraged in this spontaneous kind of expression, and the other children should be encouraged to listen to him. To the young child, as we have pointed out throughout this book, it is not the finished product that is important but the activity.

Children need to be taught to *hear* as well as to listen. Such games and exercises as the following will develop their auditory sensitivity.

1. Recite jingles and nursery rhymes, especially those which emphasize a particular sound, such as "Bye-Baby-Bunt

ing," "Hickory-Dickory-Doek," etc. Choral speaking of rhymes and poems is helpful.

2. Have children listen for words beginning with the same sound and suggest other words beginning with that sound. Give a number of words beginning with the same sound and then give one beginning with a different sound, as "man, money, mother, milk, many, sled" and have children raise hands as soon as the different word is pronounced. Do the same with rhyming words.
3. Make a chart containing pictures of objects beginning with the same sound. Have children point to each picture, naming it and listening for the beginning sound.
4. Give oral directions involving two commissions, then three, then four or five. "Put a pencil on the table, hop around the room, and then stand by the desk." Children watch to see if the child does all the commissions; if he forgets one, other children try until one child succeeds.
5. Tell a simple story of two or three sentences. Have children retell it as accurately as possible.
6. Tap on the desk several times. Have children listen, count mentally, and then tell the number of taps. Vary by tapping slowly, quickly, and in irregular rhythm.
7. Have children play singing and musical games.
8. Have children close their eyes while one child recites a jingle. Others try to guess who spoke by recognizing his voice.

Writing Experiences

No longer is the kindergarten child expected to know how to write his name. Only those children who manifest especial interest in writing should be encouraged to do so. Many first-grade teachers prefer that the child begin his first-grade experience without having learned to write his name, because the manner in which he has been taught to write it at home or in

kindergarten may differ from that used in first grade. Most parents teach their children the use of the printed alphabet rather than manuscript. It might be wise to orient parents of kindergartners to the manuscript alphabet in order to forestall any necessity for relearning and consequent confusion in first grade.

There is little need for written expression in the kindergarten. Writing is usually restricted to letters dictated by the group to the teacher, to thank people who have done some favor for the children, to ask for information, to invite parents to visit, or to greet a child who has been absent because of illness. Toward the end of the year, a few mature children may ask the teacher to write a simple one- or two-sentence "story" to accompany a picture. Sometimes children returning from an excursion which has been especially meaningful may wish to compose a group story, with illustrations of what they have seen. The teacher, of course, in all instances does the writing in manuscript. Such writing activities demonstrate to children some of the many functions of the written word and thus contribute to their "readiness" for reading and writing in the first grade.

"Reading" Experiences

The program of the kindergarten should be planned so as to provide the child with an abundance of first-hand experiences which he can draw upon in learning to express himself. But it should also provide vicarious, or "second-hand," experiences through stories and poems. Through these media, also, the child learns that the written word can be a source of pleasure and information, that it can not only afford him enjoyment—the primary purpose of the literature program in the kindergarten—but also acquaint him with his environment and interpret to him the world in which he lives. Books and stories, then, are not a substitute for living; rather, they add immeasurably to its richness.

Storytelling also provides one of the best situations for helping children learn to listen attentively for increasing lengths of

time. Under favorable conditions, the kindergarten child is able to sit and listen to an interesting story for as long as fifteen to twenty minutes. A few finger plays (see pp. 257-60) may be an effective means of attracting the attention of the group. The teacher should, of course, make certain that children are comfortably seated, that they can "see," and that the stories are sufficiently short, interesting, and within the group's experience.

Choosing the Story

Most teachers tend to err on the side of choosing stories that are too complicated in sentence structure or vocabulary rather than stories that are too simple. Stories for kindergartners are good only when the children enjoy them. Even if they are rated as classics by adults, they are poor if the children are unable to understand them or are bored by them. And the best way to find out what interests children in the kindergarten is to observe them at play and listen to their conversations.

Some things which cannot be done with children in large groups can be done easily with one or two children. A child by himself or with a friend will listen for fairly extended periods of time to stories read or told to him—even stories that would not hold the interest of a kindergarten group. The presence of other children tends to distract the attention of even the child who, by himself, greatly enjoys being read to. Then too, in any group of children there is a great range of individual differences. Some children, perhaps because they have had little previous experience with literature, have difficulty in focusing their attention on stories for more than a few minutes at a time, and when they become restless they may distract the others in the class. Children also differ in the extent to which they can understand and enjoy certain kinds of stories.

Unfortunately, most teachers are forced to adapt the level of the story told and the length of the story-telling hour to the capabilities and interests of the average or below-average child.

If the teacher is so fortunate as to have some assistance, children can be divided into groups for the story hour, to allow for individual needs. Lacking help, the teacher might encourage the child who has greater appreciation for literature than the average to take home story books from the kindergarten library so that his parents can read them to him. Most four- and five-year-olds will find this a very exciting proposition.

The young child most enjoys stories about home life and about children like those in his experience—like himself. He likes stories about children who do things that he too would like to do and stories about animals. Stories for the kindergarten should be realistic, with a surprise in them, if possible, and with much action and direct conversation.¹⁸

The child's dramatic play provides valuable clues to his interests. His first heroes are the "doers," beginning with his own mother and father, who perform the endless domestic miracles which he experiences every day. Most four- and five-year-olds prefer to take the roles of firemen, policemen, or postmen—roles within their everyday experience—to those of kings or queens, which are not part of their world.

Young children seem drawn to living creatures, and few "fours" and "fives" do not enjoy stories about dogs, cats, rabbits, and other animals familiar to their environment. The young child often endows animals with the same thoughts and feelings as those he experiences. Children recognize themselves in such characters as Peter Rabbit, because, like Peter, most young children have at some time or other gotten into trouble because they disobeyed their mother.

However, the four- or five-year-old child is not yet ready for symbolic stories about nature, such as "How the rabbit got his long ears" or "Why the robin's breast is red." The kindergarten cannot understand the significance of such stories; they should be presented later, when the child has a better hold on

¹⁸ Helen Heffernan, *Cuddling the Young Child*, Boston, Heath, 1951.

reality. Such traditional stories as "Peter Rabbit," "The Three Bears," and "The Three Little Pigs" may be the only kind of fanciful nature or animal stories that most kindergartners can truly enjoy.

At one time it was believed that any story which was short, had a simple vocabulary, and was sufficiently moralistic was suitable for the young child. But during recent years our improved understanding of children has been reflected in the stories written for them. We have discarded the obviously moral story along with the symbolic. Stories of this type mean very little to the young child; he lacks the experience necessary to understand them.

But, in selecting realistic stories for children, we must be careful not to become so interested in the content that we forget about quality. Stories of everyday experiences need not be drab and commonplace; even if the theme is drawn from everyday life the story can have literary merit and charm. Nor do stories for children need to be written down until they become an insult to the child's intelligence.

Children like humorous stories, provided that the humor is not too sophisticated.¹⁷ The young child's sense of humor is broad and, from the adult point of view, rather crude. Children laugh hilariously at slapstick physical situations—at someone falling into the water, getting pulled into the air by a gas-filled balloon, or ripping his clothing. They also find humor in queer names and nonsense syllables. What sends children into gales of laughter sometimes leaves adults without a smile, because the child's sense of the ridiculous is so different from the adult's. On the other hand, children cannot see humor in what adults feel is absurd until they are sufficiently familiar with the ordinary and commonplace. Many books ostensibly written for children can be appreciated only by adults. The teacher may be amused by books about children which in effect poke fun at their immaturity. But even if such books are heavily illustrated, written in a

¹⁷ May Hill Arbuthnot, *Children and Books*, Chicago, Scott, Foresman, 1957.

limited vocabulary, and bear all the other superficial earmarks of a book for the kindergartner, it is unsuitable for him, for he lacks the perspective necessary to enjoy it.

Book Illustrations

To the young child, pictures *are* the story, and the teacher who is reading to kindergartners should make sure that all children can see the illustrations. She should be so well acquainted with the story that showing the pictures becomes the most important part of the activity. If the group is unusually large, the teacher should assure children that they will get to see the pictures after the story is finished. Or she may wish to show the illustrations before she begins to tell the story and again after she has read it.

Children seem to have some rather strong preferences in illustrations. They appear to enjoy pictures of children, of animals, and of other familiar subjects. They like pictures which are close to the reality that they know. Mellinger¹⁸ says that young children cannot appreciate pictures unless "the finer interpretations of the artist express feelings within their experience."

Young children prefer pictures with bright colors, plenty of action, and no distracting details. Brightly hued pictures have much greater appeal than silhouettes, black-and-white drawings or photographs, or pictures with very delicate colors.¹⁹ In fact, Dalglish²⁰ finds that "Many children of kindergarten age will choose an uninteresting colored picture in preference to an interesting black and white one." They prefer line drawings to silhouettes, and they prefer halftones (i.e., photographs, paintings, washes, or otherwise shaded renditions) to line drawings.

¹⁸ Bonnie E. Mellinger, quoted in J. Murray Lee and Dorris M. Lee, *The Child and His Curriculum*, New York, Appleton-Century-Crofts, 1950, p. 149.

¹⁹ Heffernan, *op. cit.*, p. 122.

²⁰ Alice Dalglish, *First Experiences with Literature*, New York, Scribner, 1932, pp. 21, 22.

Children appear to be very much aware of the physical make-up of books. They show a marked preference for books with many illustrations, and they prefer large pictures to small ones. Even the size of the book seems to have some influence. Young children seem to prefer large books and large type to small books and small type. The cover of the book is also important. "Children prefer an illustrated cover and a binding of bright color."²¹

Children also enjoy humor in illustrations, but it must be simple and easy to understand. Good illustrations have as much appeal for children as the text of the book. Any number of illustrators are creating beautiful books for children—too many to be discussed here. Huber's *Story and Verse for Children* has an unusually good listing and discussion of children's book illustrators.

Picture-story books not only afford genuine pleasure to the kindergarten child but also may help to develop a readiness for reading. Many of the original stories of children are inspired by pictures in story books.

Poetry for Children

Contrary to the belief of many teachers, children enjoy poetry, especially poetry which has a musical quality. One of the best ways of instilling in children a liking for and an appreciation of poetry is to give them pleasant experiences with it at an early age. Listening to and reciting poetry should be joyous experiences. The kindergarten teacher should have at her command a variety of poems appropriate to many occasions which she can produce as the need arises.

Poetry more than any other form of literature can help children to develop sensitivity to language. It is the "melody and movement," the cadence of the words, that appeals first to chil-

²¹ Miriam B. Huber, *Story and Verse for Children*, New York, Macmillan, 1955, pp. 33, 34.

dren. They respond to it with enjoyment and participation, much as they do to music.

Poetry is meant to be heard *and* spoken. From their earliest experiences with it, children should be encouraged to join in reciting poetry with the teacher. Children who are given many such opportunities to join *informally* in repeating poetry will soon accumulate quantities of verse without effort.

Although children enjoy jingles and rhymes, poetry need not necessarily rhyme in order to appeal to kindergartners. Much modern poetry has rhythmic qualities without rhyming. And many of the poems that children themselves create are in free verse or poetic prose rather than in more traditional poetic form.

To build and maintain the interest of the young child in poetry, Lane²² gives the following advice to teachers:

1. Unless you love poetry, don't attempt to give it to children. Some people seem to be quite insensitive to poetry, and if you are one of these, leave poetry to the teacher in the next classroom.
2. Give children many and varied experiences in poetry. Do not confine poetical selections to the few standardized ones so that children's tastes are not explored.
3. Encourage children to express themselves honestly about the poems they like. Do not be disturbed if their tastes do not coincide with yours.
4. Give children some poetry written for people older than themselves. Much of the poetry written for children is quite condescending.
5. Recite poems rather than read them. A teacher who is independent of the book has more freedom of expression, which adds interest to the poem.

These suggestions, of course, apply as well to stories for the kindergarten—and even to aspects of the music and art program.

²² Robert Lane, *The Teacher in the Modern Elementary School*, Boston, Houghton Mifflin, 1941, p. 288.

In subject matter, poetry for children should be similar to stories and illustrations for children: kindergartners enjoy poems about themselves and their own activities, about animals and other familiar things in their environment. However, the teacher must be careful to distinguish between poems written *for* children and those written *about* children. Many so-called poems for children are actually poems for adults which merely describe the amusing antics of children from an adult point of view. To the extent that poetry is self-conscious, sentimental, or condescending, it is unsuitable for use with children.

Telling the Story

In order to help children learn to value and enjoy poetry and stories, the teacher should learn to narrate well. The good storyteller chooses material suitable to the age and interests of her audience, selecting the best from what is available. She learns the story or poem so well that she is not dependent on the text. If she is telling rather than reading, she knows the material well enough to be able to tell it simply and naturally, with all the feeling and humor demanded but without overdramatization. She knows how to handle the interruptions of children tactfully and does not interrupt herself unnecessarily. The story hour can become a burden instead of a joy to children if the teacher feels a need to comment excessively during the reading of a story or if she thinks evaluation is necessary after its completion. The child is robbed of a delightful experience if he must answer a series of questions to prove that he has understood. The wise storyteller knows that it matters little if the child has not understood the story in its entirety, provided that he has enjoyed it and has acquired impressions and images from it. Children feel no need to have everything explained.

The question of whether the storyteller should memorize a story word for word needs to be considered. When preparing

a story, a good plan is to visualize the action rather than the words. If she knows the action, the narrator will not need to know the precise words used by the author. (Some classics, however, among stories for children are best told in the original language. It would be difficult to improve on the style of the *Just So Stories* or *Alice in Wonderland*.) Most important, the good storyteller presents the story but keeps herself in the background, knowing that it is the images and ideas in the story that are valuable rather than gestures or efforts at interpretation on her part.

A natural outgrowth of story time is dramatization. Children spontaneously and universally participate in dramatic play, and they like especially to act out favorite stories. Dramatization has value in language development; further, it provides an excellent opportunity to develop originality and imagination. It not only helps children to add to their fund of information and to their store of words but also helps them develop greater facility in the use of sentences.

Any activity which helps children increase their language ability is valuable in the kindergarten. Language is an indispensable tool for children because, no matter what the area of human experience into which the school leads its learners, the guideposts along the way are decipherable in terms of language. The four- or five-year-old is being rapidly catapulted into the world of symbols, and the more opportunities he has to develop his language abilities, the more easily he will be able to adjust to his environment.

Problems for Discussion

1. Miss Zim says that a child can be recognized as slow learning far more easily when children are engaged in a language activity than when they are on the playground. How might she justify this contention?
2. Should a story which teaches a moral never be read to kindergartners? Defend your answer.

3. Observe some kindergarten children and try to ascertain what kinds of things make them laugh. How do they compare with the kinds of things that make you and other adults laugh?
4. What would be the determining factor in your decision to tell a story rather than read it?
5. In the Elm School Kindergarten, which draws its population from the upper socioeconomic class, most of the children seem to have little hesitancy in expressing themselves in front of the group. On the other hand, children in the Grove Street Kindergarten, most of whom come from families in the lower socioeconomic group, are shy about talking. Can you account for the differences between these two groups of children? Are these differences to be expected in most situations like this? Why?
6. Miss Johnson reports that speech clinicians in her school system do not do any corrective work with individual kindergarten children. Can you find any justification for this apparent unconcern about the speech problems of kindergartners?
7. At a recent PTA meeting, Miss Ford suggested that the mothers of her kindergartners encourage the children to bring a few of their favorite toys to school. These toys, she says, will help the children learn to talk before the group because they will give the youngsters something to talk about. Why should Miss Ford go to this trouble? Why shouldn't she just encourage the children to talk about their toys without bringing them to school?
8. Which is more difficult for the young child, listening or speaking? Why?
9. As a rule, Miss Dandridge does not interrupt children when they are speaking before the group to correct their errors in English usage. Do you agree with this procedure? What factors related to how the child learns to use language are involved here?

Suggested Additional Reading

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10. Play and Games

Play among children is universal. It is a biological necessity through which growth takes place. Regardless of their culture, all children participate in play activities of some kind.

Play is vitally related to the child's need to be active, to grow, to give motor reactions in response to situations. Through play, the child develops his growing body, building up the vitality which facilitates his emotional, intellectual, and social growth. Play is, as well, the child's way of learning about the world through experimentation with his environment, his chief method of self-education. It is also one of the most important means by which he grows in his social behavior. And through play the child can express and release many of his emotional tensions. Play, therefore, is not something in which the child should be "indulged" until he is old enough to do "worthwhile" things. Play should be encouraged because it is the child's chief business.

Because play involves every aspect of the young child's development, children perhaps learn more through play than through any other activity. The child's play seems to be one of nature's ways of enabling him to receive innumerable sensations and to develop his powers of observation. In his play the child manipulates and experiments with all manner of objects and materials, learning to use his environment purposefully. He is

stimulated imaginatively and creatively. He tries and often makes errors in judgment, but he also often succeeds. Through play, the child exerts his growing mental powers. Observe, for example, the child who has just become aware of the meaning of numbers. He counts the blocks as he takes them off the shelf; he counts the jars of paint at the easels; he counts people; he counts things. He uses numbers wherever the opportunity arises; he counts everything in sight and then counts again. This counting is a game to the child, but it is also a valuable learning activity.

The wise kindergarten teacher capitalizes on the child's natural love for play as an important avenue for learning. She watches for opportunities to teach safety habits, for example, in dramatic-play situations. The child's delight in "playing automobile" can become the basis for teaching the significance of the traffic signals and other essential rules of safety.

Dramatic play also offers opportunities for the teacher to observe and improve children's social understandings and attitudes. If, when a group of kindergartners are "playing grocery store," the teacher finds that the "clerks" do not know how to answer the telephone properly, she can take the opportunity afforded by the play situation to teach them the social amenities involved in such an activity. If children appear to reject a given child or to place him always in relatively unimportant roles, the teacher can use a dramatic-play situation to teach children that they all have something to contribute to the group. She might call attention to some special talent of the child in question, pointing out, for example, that Tony has a good voice and would therefore be a much better barker than water carrier when the children are playing circus. Or she might suggest that the children take turns being ringmaster so that each has a chance to play the most important role.

Play, in addition, helps to meet the child's emotional need to belong, to be like others, to have status in the group and a feeling of personal worth. Physical prowess and skill in games and stunts appears to rank high among the factors which lead

to a child's acceptance by his age mates. The child who can swing successfully from the trapeze bar has the adulation of the group, and the child who can run so fast that he never gets tagged is the envy of all his classmates. Many a mentally slow child who is rejected in the classroom is accepted on the playground if he is skillful in games. The effect on the child's personality of achieving some success in motor performance is striking. All tensions seem to be eased; he expresses his satisfaction in his language and laughter, and he seems to radiate joy.

Success in other forms of play can be no less significant. Children generally do not play at things which they do not do well; their play, therefore, can give them a measure of achievement to offset poor performance in areas in which they are less competent. Just as the child who climbs to the topmost rung of the jungle gym is, at least momentarily, a hero, so also is the child who can manage to build a boat of blocks so that all can take a ride. Even if the child is not physically strong or adept, he can experience the glow of success in play activities of his choice.

The play group provides a natural setting for teaching children many invaluable lessons in social adjustment which will be of help to them throughout their lives. In the process of group play, children learn the need for establishing and obeying rules and for subordinating their own desires to the interests of the group. By sharing play experiences and materials, they learn to exercise self-control, to listen to both sides of a controversy, and, above all, to be fair. Play involves the ability to adjust; it necessitates a degree of independence and self-direction. Play is democracy in action. It develops both leaders and followers, and it recognizes the contribution that each child can make to the group welfare. Play is one of the child's first introductions to self-discipline. A child who disobeys the rules of a game or who interferes with the play of other children will be promptly and effectively corrected by his peers. In this manner he soon learns

the need for restraining his own impulses in order to participate in group activity, and he learns, too, that he has a responsibility for the success and a share in the consequences of that activity.

Play has many functions and many values. It may be an expression of sheer exuberance, as when children aimlessly run and shout. This is the blowing-off-steam kind of play. In contrast, dramatic and imaginative play permit the child to experience vicariously much of what he sees about him. Play is, then, a muscle builder and a mental developer, a socializing force and an emotional release. Above all, to children, play is work. In fact, it may be the hardest kind of work, grueling, tiring, and sometimes discouraging. But it can also give the child a compensating measure of self-realization and pride in his efforts and thus can be of great value. Because play serves so many functions in the lives of young children, no clear distinction can be drawn between play and work. What is important is the teacher's understanding of how children learn through play and of the work elements present, to some degree, in all play.

Developmental Stages in Play

The modern school now recognizes that most of the child's first year in school must be devoted to socializing him, to helping him learn to co-operate in a group. This social growth is a slow process, dependent on maturity and experience. In the process of group play the child learns many lessons of social adjustment and adaptation. Experiences in taking turns, in sharing, in playing the game fairly all add to the socialization process.

By the time the child is four or five years old, he has made great strides in socialization. But few children of this age are sufficiently socialized to play co-operatively. There seem to be several developmental stages through which all children pass before they are capable of full participation in group activities.

The very young child plays by himself; other children have little social value to him. At about the age of three, the child

becomes aware of others playing near him. He may pursue the same activity as the other children, but he is not yet playing *with* another child. Two children playing beside each other at the sand box may at first appear to be playing together, but brief observation will demonstrate that this is "parallel play"—each is pursuing his own interests. Although they are near each other, there is no interchange of ideas and usually no sharing of toys.

At a slightly later stage of development the child is capable of "associative play" in small groups with other children. In this setting the children have a common purpose, but the group itself is very fluid, with children leaving or returning to participate at will. For example, John suggests playing fireman. A few children begin to construct a fire station, with John as chief. During the process Jim joins the group, appointing himself fire chief. John, tiring of the work of constructing the fire station, wanders off to see what is going on in the doll house corner. He does not return, but the project continues without him. Other children join the group or wander off without materially upsetting the original plans. Such leadership as may exist in a group like this is unstable and shifting. Although there are occasions, even at this early age, when real leadership does reside in one individual, usually leadership passes from child to child without any great disturbance. Associative play characterizes many groups of four-year-olds or even older children who have had little group experience.

Eventually, children become capable of genuinely co-operative play in a group with some pattern of organization and clearly defined leadership which holds it together. Few five-year-olds, however, are sufficiently mature to play co-operatively in a group of more than two or three children. Typically, children cannot participate in truly co-operative play in a larger group until they are about nine years old.

Many five-year-olds, even mature ones, spend a great deal of time—perhaps as much as one third to one half of the kinder-

garten day—playing by themselves,¹ although they also play frequently in small groups, working on common projects. Sometimes children become overstimulated and need to work or play by themselves. The child's need to be alone occasionally is normal and should be respected by the teacher—and by other children. The teacher should provide space where children can work or play away from the group and materials for solitary as well as group play.

There is no sudden shift from one stage to another in play or in any other developmental sequence, and, of course, there are great differences among children in the rate at which they progress from one stage to another. At any given time, all levels of development may be found in the kindergarten. Some five-year-olds may spend most of their time in parallel play, like the typical three-year-old; some "fours" are as capable of co-operating in small groups as older children are. Much of this difference may be due to the experiences which children have had previous to school entrance. The child who has had little association with other children will need more help in integrating with a group than the child who has had much experience playing with others of his age in the neighborhood or the nursery school.

Even though there are wide differences among individuals in group co-operation, at the beginning of the kindergarten year, few of the children will be capable of much co-operative endeavor of any kind. But many children, as they approach their sixth birthday, become able to co-operate to the extent of playing very simple team games. The game—perhaps a relay race—may be absurdly simple by adult standards, but the ability of young children to function in it marks a forward step in their social development. The child who can participate successfully in even a simple game has developed, at least to some extent, the ability to subordinate his own desires to the interests of the group or to identify them with the group interests.

¹ Ruth Strang, *An Introduction to Child Study*, New York, Macmillan, 1951, p. 189.

Quarreling Among Young Children

Since children express their egos through their play activities, there will inevitably be some conflict of personalities during play. We have some evidence that nursery-school attendance increases the number of fights and quarrels among children—perhaps because the nursery-school child has many more social contacts with many more children than ever before in his experience.²

As children mature, quarreling becomes less frequent. But all desirable qualities grow slowly; before children can relinquish the need for fighting and quarreling, they must have much experience with techniques of social adjustment, and they must have the security gained from many successes. Although the kindergarten year sees a good deal of progress in social development, conflicts will continue to occur; children will continue to settle disputes by physical force, name-calling, or appeals to adults. Most preschool children fluctuate greatly in their response to other children. Sometimes they show love and sympathy, at other times hostility and aggression. At this age friendships are short-lived and rather volatile. Research indicates that friends tend to quarrel more, rather than less, than nonfriends, perhaps because friends spend more time together and therefore have more occasions to disagree.³ These quarrels may be marked by real anger, but, fortunately, prolonged anger among young children is rare. Children who one moment appear to be quarreling violently may be bosom pals the next. In fact, a violent quarrel may serve to cement the friendship.

Excessive quarreling among young children may be a sign of social immaturity; it may also indicate immaturity in language development. For young children who are deficient in language, physical violence may be the only means of expressing their wishes and of defending themselves. Some immature four- and

² A. T. Jersild and F. V. Markey, *Conflicts Between Preschool Children*, Child Development Monograph No. 21, New York, Bureau of Publications, Teachers College, Columbia University, 1935.

³ Horace English, *Child Psychology*, New York, Holt, 1951.

five-year-olds use hitting or other physical means of gaining attention to make social contacts with others. Violence is sometimes nothing more than the young child's way of asking to join a play group, and he may use it merely because he knows no other way of communicating with others.

The teacher will need to help some children to gain sufficient experience and facility in language to be able to ask other children to play with them or share toys instead of using physical aggression to make their wishes known. Children who are unable to use language to settle differences should not be disciplined too severely for using physical force; punishment or overcriticism of such children may deprive them of any defense. Quarreling is a stage in social development; children should not be punished for what is essentially immaturity. Rather, the teacher should help such children to grow in language facility and to learn that they can play more happily if they ask to join a group than if they make their presence or wishes known by attacking other children. As children mature they talk more in their quarrels, depending more and more on argument rather than on physical force.

Children from the lower socioeconomic groups may need special help in this area. As we have pointed out in an earlier chapter, such children tend to be immature in language development as compared with other children of their age. They may, in addition, be immature socially because they have had little previous experience in co-operating either with adults or with other children. To add to the problem, although middle-class parents on the whole discourage fighting as a means of settling disputes, parents in the lower socioeconomic groups often encourage it. For these reasons, the play of lower-class children is usually more aggressive than that of middle- or upper-class children. Appel found that day-nursery children from underprivileged groups not only had a larger total number of conflicts than nursery-school children from more favored environments but that, as might be expected, there were relatively more con-

flicts over possession of material objects than among children from the higher socioeconomic groups.⁴ The teacher should try to help these children learn to settle their differences by less violent means. She may need to work with them to improve their language patterns.

We have evidence⁵ that more quarrels occur in situations of restricted space and inadequate play facilities than in kindergartens with ample playgrounds and equipment. Unfortunately, few teachers are in a position to expand the kindergarten play area or improve the facilities. However, the teacher can do much to help children in their interrelationships. This does not mean that she should interfere with their play or impose adult standards of social behavior on children. Too much interference with children at play may increase rather than decrease friction; what appears in adult eyes to be a quarrel may be just the beginning of a satisfactory period of play with a friend. So long as children are working out their problems of interrelationships in a manner compatible with their stage of maturity, adults should not interfere. However, if children are unable to participate satisfactorily in the group, they should be helped to improve their behavior so that they will be acceptable to others.

Sometimes a child becomes troublesome because he is unable to fit into the play situation. Because he cannot be fire chief, he may use his energy to annoy other children who are playing fireman. If the teacher helps him by suggesting to him and the group that "John would make a good hoseman," the play goes on in a manner satisfactory to all. But should she merely forbid the child to annoy the others, rather than suggesting a way in which he can join their play, she will both make the child resentful and deny him the opportunity to improve his relationships with other children.

⁴ M. H. Appel, "Aggressive Behavior of Nursery School Children and Adult Procedures in Dealing with Such Behavior," *Journal of Experimental Education*, 1942, XI, 185-99.

⁵ Strang, *op. cit.*, p. 189.

Interpreting Play Behavior

The play of the child reveals much of his inner life—not only his concerns and interests but also his needs and problems. From a diagnostic point of view, observation of the child's play gives good clues for guidance. The child engages in play wholeheartedly, throwing off all self-consciousness and restraint. He reveals his true nature in his play, and if he is disturbed he will show it in these moments when he is really himself. Play behavior therefore is an important indicator of the child's mental and emotional state.

Children who are immature or who have had limited experience in playing seem to prefer free muscular play, involving climbing, running, and jumping activities. Children who harbor a great deal of aggression may engage in destructive kinds of play—knocking down blocks, pulling things to pieces, and otherwise destroying or damaging toys and materials. Children who are emotionally disturbed may tend to prefer playing with things to playing with other children. Often they are very demanding of the teacher's attention. They may frequently regress to very infantile types of play activity—aimless piling of blocks, aimless ball throwing, apparently purposeless paint daubing.

The child's dramatic play may be the most significant indicator of his emotional adjustment. Because dramatic play is a natural medium of self-expression for the child, he reveals in it his desires, fears, grievances—everything that disturbs him. In his play he can act out his problems in a manner acceptable to himself and to others—something which he would be unable to do otherwise. For this reason, specialists in child psychology use a form of dramatic play as the basis for their diagnosis and treatment of children's emotional problems.* In play therapy, the child not only reveals what is of concern to him but also can be helped to work through to a solution.

* See V. M. Axline, *Play Therapy*, Boston, Houghton Mifflin, 1947; and R. E. Hartly, L. K. Frank, and R. M. Goldenson, *Understanding Children's Play*, New York, Columbia University Press, 1952.

Needless to say, the kindergarten teacher should use the utmost caution in interpreting the play behavior of children or attempting to handle their emotional difficulties. This is a field best left to specialists. She should, however, be aware that a child's play behavior must sometimes be taken at more than face value. And although the teacher is not able to handle the problems of seriously disturbed children, she may be of help to some who are experiencing minor difficulties in adjusting to the routines of the kindergarten.

Occasionally some destruction of property may result from children's inability to understand equipment. Children from poorer homes, for example, may have had less experience with toys than other children and may consequently need the teacher's help in order to learn to play constructively with them. Other children may be so inhibited at home that they are veritable storehouses of aggression, which they try to release at school by fighting everything and everybody.

Perhaps the teacher will need to give these children special help in understanding how some of the equipment in the kindergarten works so that they will not experience frustration in trying to use it. She may have to participate with these children occasionally until they learn how to play constructively with the toys and with other children. For children who come to school with pent-up aggression, she may have to provide special play materials which permit them to work out their problems. Painting at the easel may help; pounding or kneading clay may be the answer. Possibly vigorous outdoor play will help to get the child on an even keel. More than one kindergarten teacher has solved this problem by providing a punching bag so that children can vent their hostile feelings without harm to themselves or others.

In some groups, a few children may be hesitant to participate in group dramatic play. A skillful teacher can help such a child by making a specific suggestion about how he can contribute to the activity. Perhaps he would like to be the ticket taker for the

"train ride"; perhaps he could be the man who delivers groceries to the "family" in the playhouse corner. Usually, once a child has had some success in a dramatic-play situation, he will continue to participate.

Play Materials

Because individual children differ so widely—in capacities, in rates of growth, in attitudes, achievements, and background—their play needs also differ widely. Materials for children's play must be provided in sufficient variety and quantity to take account of these differences and to exercise all the growing skills of the kindergartner.

It is difficult to say exactly how much equipment the kindergarten should have. If the group does not have sufficient play equipment, however, quarreling may result as children compete for available toys and materials, or because some of the children are unoccupied and therefore ready for "mischief." On the other hand, too much equipment can also be undesirable. If children are presented with three or four alternative play materials, they can usually settle down to constructive activity with one. But if they have too many choices, they may be so overwhelmed by the possibilities that confront them that they are unable to focus their attention on one piece.

Blocks are probably the most useful and most used equipment in the kindergarten because they lend themselves to so many types of activity, depending on the developmental level of the child. The two-year-old piles them aimlessly; the five-year-old uses them purposefully to build a store or house which then becomes the basis for dramatic play. In outdoor play, blocks, in combination with other building materials, are used both for construction and for dramatic play. Indoors, somewhat smaller blocks are used. Blocks can be arranged as a house, a store, tables and chairs, a train, a space ship, a coal mine—anything the fertile imaginations of children conceive them to be. In a study of chil-

dren's preferences in play materials, Farwell⁷ found that blocks ranked first in popularity, with girls as well as boys, not only among constructive materials but among all indoor playthings. Van Alstyne⁸ also found that blocks were highly preferred as play materials by most children aged two to five years. All kinds of blocks are used in the kindergarten—hollow, solid, big, small. They may be of virtually any size or shape—square, oblong, crescent, etc. Hollow blocks, of course, are lighter, but a few solid and relatively heavy ones should be provided to stabilize constructions and to give children exercise in using the large muscles.

Children use almost any available material in their dramatic play. A dress-up box full of discarded adult clothing or other garments suitable for use as costumes can stimulate much dramatic activity.

In addition to its other values, play can help children build healthy bodies. Because much of the equipment needed for large-muscle development requires a great deal of space, and because playing in the open air helps children develop good health, as much as possible of the child's play should be carried on out of doors. Vigorous outdoor play on the jungle gym and other climbing apparatus improves the child's muscular control—an important goal of the kindergarten—and may, in addition, have emotional values. Young children see the world from the underside of many things; climbing to the top of the gym and being able to look down on the world of "giants" can bring the child great emotional satisfaction.

Although some kindergartens in the Northern states have indoor jungle gyms, such equipment is best used outdoors if climatic conditions permit. Some kindergarten teachers prefer wooden to metal gyms because the rungs are usually larger and less slippery than those on metal gyms and therefore are safer

⁷ L. Farwell, "Reactions of Kindergarten, First- and Second-Grade Children to Constructive Play Materials," *Genetic Psychology Monographs*, 1930, No. 8, pp. 431-562.

⁸ D. Van Alstyne, *Play Behavior and Choice of Play Materials of Preschool Children*, Chicago, University of Chicago Press, 1932.

for the child's unsteady footing. Wooden gyms, however, are less durable.

On the playground there should be other apparatus on which children can climb as well as walking boards, large balls, a sand pile with some digging tools, large hollow blocks, a seesaw, and a slide. Often a small playhouse is part of the outdoor play facilities. Especially valuable are materials which can be climbed on, piled on one another, or carried about, such as boxes, nail kegs, long boards, barrels, orange crates, wooden boxes of all kinds, tubs of varying sizes, and ladders, wooden and rope. These materials offer opportunities for imaginative and dramatic play in addition to vigorous exercise.

Next to blocks, Farwell found that among kindergartners the favorite indoor playthings are painting and modeling materials. Drawing and cardboard construction materials rank next, and paper construction and sewing materials are the least popular. Van Alstyne found that blocks, dolls and doll houses, and clay, in that order, appeal strongly to most children aged two to five; that four-year-olds show greater interest than two-year-olds in balls, beads, small cars, and scissors; and that five-year-olds show increased interest in crayoning.

Some materials appear to offer more opportunity for socialization than others. Dolls, wagons, and blocks encourage cooperative play; easel paints and clay encourage more solitary play. Van Alstyne reports that certain materials have "higher conversation values than others. The doll-corner, block play, and crayoning rank high while painting and work with scissors and books rank low in conversation value."* Both kinds of material should be part of the well-equipped kindergarten.

There appear to be some sex differences in play interests, even at the age of five. Boys are more likely to prefer big-muscle activities than are girls, although they too enjoy quiet activity occasionally. And girls are, as we have mentioned, somewhat

* Committee of National Conferences of Research in English, *Readiness for Reading and Related Language Arts*, Chicago, 1950, p. 38.

more proficient with materials requiring manual dexterity, such as scissors. This difference may be due to cultural expectations, however, rather than to innate factors; therefore, no sex lines should be drawn in providing materials or making suggestions for their use. Both boys and girls should have opportunities and encouragement to carry on a wide range of activities. Girls should be encouraged to experiment and play with hammer and nails, and boys should be given the opportunity for doll play. Children play with little concern for the so-called femininity or masculinity of these activities unless adults make them conscious of it.

Play equipment for young children should generally be simple and it must always be safe. It must also offer some challenge to the user. It should not be so complicated that it discourages the child or so simple that it offers no stimulus to thought. The habit of success in dealing with materials is important in encouraging the child to try out new ideas. The four- or five-year-old is a very inventive being, but at times he may need help in exploring the possibilities of equipment which has lost its appeal. The introduction of some makeshift material to expand the potentialities of existing equipment may serve the purpose as well as new equipment. To children who have lost interest in the trapeze bar, for example, a rope suspended from the bar is a "new" piece of equipment. The children can now climb in a new way. Long boards propped on the lower rungs of the jungle gym will stimulate new ideas for its use, and a few discarded nail kegs added to the blocks will produce new interest in building.

Games

Because most four- and five-year-olds are not sufficiently mature to remember more than a very few directions at a time, games for the kindergarten child should be very simple and loosely organized. Highly competitive games should be avoided in the kindergarten because such games involve losing, which is

a blow that this age child finds difficult to weather. Games in which the entire group can participate have more appeal than those which require most of the children to remain inactive while only a few perform; children are eager to be participating rather than watching whenever there is activity of any kind. (This does not, however, rule out "circle" games; although such games require only one or two children to be active in the sense of running or otherwise engaging in physical movement, the rest of the group is usually more active than mere description of the game would lead one to expect. When one child is chasing another, for example, as in "Duck, Duck, Goose," the children who form the circle usually jump up and down, shouting and wriggling with anticipation and excitement.)

Games in the kindergarten should not demand skills which the "fours" and "fives" have not yet mastered. Singing games, or simple action games which have been set to music, have a special appeal for kindergarten boys and girls, probably because of the simple rhythm and repetitive rhyming, which always seem to interest children.

The simple games described below¹⁰ are usually successful in the kindergarten and may be played, in one variation or another, either indoors or outdoors. Most of them require no equipment or, at most, a whistle, bell, or ball.

1. *Squirrel in the Trees*—Children form a circle, counting off by threes. Each pair of "ones" and "threes" holds hands, with children facing each other to form a "tree." Even numbers are "squirrels." Each tree holds a squirrel, but one or more squirrels are without trees. On a signal, each squirrel must find a new tree. The extra squirrels compete, as in musical chairs, so that after each "change" a new set of squirrels is left treeless. Children take turns

¹⁰ From Jessie H. Bancroft, *Games for the Playground, Home, School and Gymnasium*, New York, Macmillan, 1913; Margaret E. Mulac and Marian S. Holmes, *The School Game Book*, New York, Harper, 1950; and Hazel Richardson, *Games for Elementary Grades*, Minneapolis, Burgess, 1948.

being trees and squirrels so that all will have the experience of being both in each period of play.

2. *Animal Trap*—Half the group joins hands in a circle to form the "trap." The other half, who are the "animals," are outside the circle. When the child designated as the "hunter" signals, the "animals" run through the circle. When the hunter gives a second signal, all animals still inside the circle are "trapped" and must join the circle. The game continues until all animals are trapped. The last child to be caught becomes hunter for the next game. Trappers become animals so that all children have both experiences.
3. *Tag*—One child, chosen as "it," chases the other children. When a child is tagged he becomes "it" and in turn chases the others. (A safety zone is designated in which children who have run a great deal may rest without being caught.) *Variation a*—Children skip, gallop, or hop instead of running. "It" uses the same method of locomotion as the children he is pursuing. *Variation b*—"It" tries to step on a child's shadow instead of tagging him. The child whose shadow has been stepped on then becomes "it."
4. *Duck, Duck, Goose*—Children form a circle and sit down, being careful that their hands and legs are out of the way of running children. One child, chosen to be "it," taps the heads of the seated children, saying, "duck, duck." If "it" says "goose" as he taps a child's head, the goose must chase him around the circle, trying to catch him before he gets back to the goose's vacant place. If "it" succeeds in reaching the vacant place in the circle, the goose becomes "it" and the game continues. If "it" is caught, he goes into the middle of the circle, where he is to be "roasted" for a feast at the end of the game, and another "it" is chosen. At the end of play, children remaining in the circle "feast" on the roast geese in the

- center. The teacher needs to guide children in this game so that all children have a turn to be "it."
5. *Throw Ball*—Children stand in a line, facing one child, who holds a ball, at a distance of six to eight feet. (If the group is large, children form a circle and the leader stands in the middle.) The leader throws the ball to a child who throws it back to him. He throws to another and the game goes on so that each child has a turn. If the leader does not catch the ball, another leader is chosen. This game should be played in a small group so that the children have a chance to be leader often. *Variation*—The leader rolls or bounces the ball to the players rather than throwing it.
 6. *Dodge Ball*—Children form a circle and the leader, in the center, tries to hit the feet of a child in the circle by rolling or bouncing a ball. When a child's feet are hit, he becomes the leader.
 7. *Run, Rabbit, Run*—About three quarters of the players are "rabbits" and the remaining children "foxes." One end of the playing area is designated as the rabbits' home space, the opposite end is the "garden," and the area in between is "woods," where the foxes roam. At the signal "Run, rabbit, run," the rabbits must run home from the garden through the woods. A rabbit who is tagged by a fox before he reaches home becomes a fox and assists in tagging other rabbits in their next venture into the woods.
 8. *Circle Tag*—Children form a circle. One child, chosen as "it," stands outside the circle. Three children are chosen to try to get into the circle without being tagged by "it." The child tagged first becomes "it." If no one is tagged the first child is "it" again.
 9. *Hunter*—One child, chosen as the "hunter," says, "Who would like to go hunting with me?" Children respond "I would," and fall in line behind the hunter, who is free

to lead them about in any designated area. The followers do everything the hunter does. When he shouts "Bang," the children must return to their seats (or to a designated "safe area"). The first child to get back to his seat or safe area becomes the next hunter.

10. *Old Mother Witch*—The child chosen as "witch" stands within a marked area at one end of the play space. The children's "safe" area is marked at the opposite end of the play space. The children run into the witch's area calling:

Old Mother Witch
Fell in a ditch
Picked up a penny
And thought she was rich.

The witch keeps asking them, "Whose children are you?" They answer giving any name, but when they say "Yours," the witch gives chase. Anyone tagged by the witch before reaching the safe area becomes the witch and the game continues.

11. *Circus Game*—The group forms a circle, with a child chosen as ringmaster in the middle of the circle. He pretends to snap a whip and as he does so names some animal. All children imitate the animal mentioned. The game ends with a circus parade in which each child imitates the animal of his choice.
12. *Crossing the Stream*—A "stream" is marked off by two chalk lines drawn two feet apart. Children line up and take a running jump across the "water." If they succeed in clearing both lines they take a standing jump back across the stream. Unsuccessful children go to the end of the line to try the running jump again. Increase the distance for children who are successful in the standing jump.
13. *Call Ball*—Children form a circle with one child in the center. He tosses the ball and as he throws it calls the

name of any child in the circle. The child whose name is called tries to catch the ball immediately after its first bounce. If he is successful, he takes his place in the center; if he is not, the original tosser continues until the ball is caught.

Countless variations of the games listed above can be developed—and the kindergarten child seems to respond to these variations as enthusiastically as to the "original."

Besides providing for sheer fun, game time has other values. Through participating in such organized activity, the child learns habits of fair play and good sportsmanship, self-confidence, and at least some measure of self-discipline in taking turns. *Co-operation is an integral part of games in which, for example, the group is trying to keep a child who is "it" either inside or outside the circle. If, because a child fails to co-operate, "it" gets out or in, as the case may be, the child's peers will administer the "discipline." And this, as we have said before, is a most effective kind of discipline!*

Playing almost any sort of game helps to sharpen the sense perception of children, but some games do this more effectively than others. Games and exercises to develop auditory abilities, articulation, and language abilities are described in Chapter 9, "Experiences in Language." Games to develop visual and motor abilities are described in Chapter 18, which discusses the role of the kindergarten in relation to "readiness."

"Free Play"

When children have adequate equipment and sufficient space for a variety of play activities, organized games assume less importance than when equipment and space are limited. Nevertheless, time should be provided in every kindergarten program for some organized play, for the many reasons mentioned above. There should be a balance between free play and

organized games consistent with the age of the children, their interests, and the adequacy of the play space and equipment to which the group has access.

Perhaps the most important consideration in guiding play for young children is that they be given ample opportunity and equipment to pursue their many and varied interests and to develop physically. Children will play whether adults will it or not—it is a normal and desirable part of their development. In an earlier day, play was discouraged. Today, the wise teacher encourages a child's play activities, because she is aware that through play he can develop physically, socially, mentally, and emotionally.

Problems for Discussion

1. It has been said that play is biologically necessary to children. What does this mean?
2. The characteristics that children look for in their friends are different from the ones adults seek. What are some of the important factors in a child's becoming a leader in the group? In an adult's? Can you account for this difference between children and adults? Is this difference a source of conflict between teachers or parents and children? Cite an instance of such conflict from your own experience.
3. Mrs. Ford says that she observes the play of her kindergartners in order to understand the children better. How can observation help in this way? What can a teacher find out about a group of children by watching them play?
4. In the four-year-old kindergarten, Jimmy is the youngest of the children, both chronologically and socially. Often his teacher notices Jimmy hitting another child in the kindergarten. A few minutes later, she sees the two children playing pleasantly together. What is happening here? How might the teacher help Jimmy? At what stage is he socially? What judgments might you make regarding Jimmy's experiential background?
5. Young children often like to climb high on the jungle gym so that they can look down on the adults below. What emotional satisfac-

tion do children derive from such an experience? Is this a good thing for children? Explain.

6. Mrs. Parker says that teaching children to express themselves linguistically is one of the goals of the kindergarten. Therefore she favors use of materials with high "conversational value." Miss Davies agrees with Mrs. Parker that the development of language ability is a worthy goal. However, she feels that there are times when children need to pursue activities of a rather solitary nature. What kinds of materials and equipment would Mrs. Parker feel are most important in her kindergarten? In contrast, with what materials and equipment would Miss Davies equip her kindergarten room? With which teacher do you most nearly agree? Why?
7. How does the quarreling of four- and five-year-olds differ from that of three-year-olds? What factors account for these differences? Does the manner in which four- and five-year-olds quarrel reflect progress or regression in social development? Why do children quarrel more during indoor play than during outdoor play?
8. Miss Jackson says that many children show ambivalent attitudes toward other children. What does this mean? Is such ambivalence "normal" in young children? Explain.
9. Mrs. Rubin spends a good deal of time giving directions and explaining the rules when she teaches games to the kindergarten group. In the process, the group becomes restless and inattentive. Moreover, the children seem to lack enthusiasm for playing the game when the time comes to play it. Mrs. Rubin is puzzled by the behavior of these four- and five-year-olds. Your knowledge of children of this age should help you recognize the reasons for the behavior of these children. How would your approach differ when you teach games to children? How much explaining can the kindergarten child absorb? Are the rules of the game important to young children? How is this related to the maturity of the child?

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II. Social-Studies Experiences

To teach children what they need to know about their environment and to help them grow in the ability to live and work harmoniously with others are the objectives of the social-studies program in the kindergarten. In a sense, these are the objectives of all education in a democratic society. But the teacher in the kindergarten has an especially great opportunity—and obligation—to carry them out effectively. For most children, the kindergarten is the first experience in living with a group of other children, outside the secure confines of the family. It is their first formal introduction to the responsibilities, as well as the privileges, of participation in society. It is their first opportunity to learn of the contribution they can make to the group welfare.

If the teacher is to guide social-studies learning effectively, she not only must know how children grow and learn but also must understand the society in which they are growing and learning. *The teacher must not only plan for the growth of the children but also "grow" continually herself, so that she can meet the needs of children in a rapidly changing world.* This means that the teacher must keep informed about developments in technology, about national and international affairs, and about the many issues, events, and problems on the local community level that are reflected in and influence her pupils' view of the world.

The Social-Studies Curriculum

The social studies form a natural core around which all other activities revolve. There is actually little in the curriculum of the kindergarten that does not relate in some way to this area. Discussing measles may be classified as a health activity, but as soon as we mention the possibility of contagion, the health discussion takes on the aspect of social studies. Talking about electricity is science, but discussing how people use electric power is social studies. A visit to the fire station is great fun for young children, but if it teaches them something of how citizens in a democracy work to help and protect one another, it can be defined as social studies. Learning to take turns in using equipment on the playground helps to solve the problem of limited facilities, but it also teaches children an invaluable lesson in group living, and therefore is part of their social-studies education.

The social studies thus are intimately related to every activity in the kindergarten. It is perhaps for this reason that much kindergarten teaching in this area is incidental and that some teachers feel little planning is necessary. To be sure, children will continue to grow socially whether we plan for it or not, but little real social understanding will result from haphazard teaching. On the other hand, it is not desirable to adhere firmly to a preconceived pattern of teaching the social studies to young children. As Ilse Forest¹ points out, the social-studies curriculum in the kindergarten needs protection from two opposing dangers. In some schools, there is "lack of coherence and definite objectives resulting from too little planning." In others, one sees a "reversion to the old dry-as-dust course of study in modern dress through a formal, stereotyped description of units or arbitrary assignments, by supervisory officers, of activities to be carried on in each grade."

Fortunately, most schools fall somewhere in between these two extremes, with some experiences being prescribed by a

¹ Ilse Forest, *Early Years at School*, New York, McGraw-Hill, 1949, p. 167.

course of study or other authority and others left to the discretion of the teacher. Needless to say, the teacher should base her choice on the interests and needs of the children.

Some teachers see to it that *all* their kindergartners have experiences centering about a circus or a farm. There is little to support this practice. However, there is certain information which all children need to learn. Every kindergartner, for example, should learn something about the rules of safety, and the teacher who is conscious of her obligations to teach children about this important aspect of group living will try to build a "center of interest" around safety. Only the interests of the kindergarten group will determine where such an activity can eventually lead. Sensitive teachers find that the explorative minds of young children force them to reach out in many directions in the social studies—toward science and the arts, reading and numbers—into any and all areas of learning.

Social education in the kindergarten should be somewhat informal, but not unplanned. Because the attention and interest span of kindergartners is brief, for four- and five-year-olds, long, elaborate units are out of place. The social-studies program can provide a better learning situation if there are many short-term units related to dominant centers of interest rather than a few long-term units. In fact, more than one center of interest may hold the attention of the group at one time. In teaching subjects, such as the safety rules, in which all children need instruction, the teacher will want to involve the entire group, but in most instances not all children need to be concerned with the same activity.

The goals in teaching young children must be rather immediate; most of them are unable to sustain interest in activities which give only delayed satisfaction. For this reason units lasting for more than a few days will fail to challenge most four- and five-year-olds. At this age few children have an accurate sense of time. What appears to adults to be a short interval may seem to them an eternity. However, children differ in this respect, too;

in any group, one or two children will be capable of sustaining attention and interest in an activity over a period of weeks. The informality of the social-studies program in the kindergarten makes it possible to meet the differing needs of all the children. While the more mature group pursues its interest in the fire station or grocery store, other children may become interested in planting a garden, building a hat store, or countless other activities.

Living Harmoniously with Others

The kindergarten-age child is increasingly able to make effective contacts with those about him. People are becoming increasingly important in his activities. The very young child says, "I want someone to play with me." But by kindergarten age, a new social concept dawns. Now the child says, "I want to play with the other children." He no longer sees himself purely as an individual but is beginning to identify himself with the group. As Goodenough² puts it, at this age "the child's newly developed skills and abilities lose some of their individualistic goals and begin to take on a more socialized character." The child still thinks running and jumping are fun in themselves, but he finds them still more fun when done with someone else or as part of a game. With some children, conversations may even begin to take the form of discussions or exchanges of ideas and information.

The kindergarten child is becoming able to modify his behavior to conform to the needs of the group. In all his actions and attitudes, he gives evidence of the beginning of a group consciousness. He is trying to reach out after companionship, "not simply for amusement, but rather as a means of extending the range of his own personality. Vaguely but surely he is coming

² Florence Goodenough, *Developmental Psychology*, New York, Harper, 1943, p. 395.

to see that 'we' is an expression that carries more weight in the world of affairs than 'I' can ever hope for." *

For most children, the first experience in trying to adjust socially to a large number of other children comes at entrance to school. Until this time, the child has been a very important member of a small and closely knit social group. It is no wonder that many children revert to immature behavior when they are first introduced to the larger, more impersonal group in school, in which they are no longer the focus of attention. Some children at this stage even seem to assume different personalities at school. A child who is aggressive at home may become meek and retiring in the schoolroom; a child who is submissive in his home situation may suddenly become aggressive when he enters the kindergarten. This apparently radical change in behavior and personality may be the child's attempt to meet a new and disturbing situation which threatens his previous adjustment.

Unless precautions are taken to make the step from home to school as easy as possible, the child's sense of security may be seriously endangered. The teacher who understands how great are the demands that this step makes on the child, who tries to contribute to his feeling of belongingness, can avoid many problems of behavior and discipline. Insecurity and the feeling of "strangeness" provide a fertile field in which fears may develop. This wise teacher will help the child to see that the world of the kindergarten is a friendly place.

Adjusting to social situations is a matter of learning and habit formation on the part of the child. The school can do much in this area. And because, in today's complex world, we are all dependent upon others for our welfare, comfort, and happiness, it is extremely important that the school help the child grow in his social understandings.

In working with young children, the teacher must have in mind some "standards of expectancy" in the area of social devel-

* *Ibid.*

opment. There are wide individual differences here as in all areas of development, and some children need much more time to work out their problems of social adjustment than others. If guidance is to be effective, however, the teacher must be aware of sequences of development, and she must have standards based on an understanding of the nature of children and of the individual child. Otherwise too much or too little may be demanded of the child for his stage of development. As a rule, the mature and capable child can solve his social problems with relatively little guidance from adults. The less mature and less capable child needs more guidance and often more control.

The socially well-adjusted kindergarten child is considerate of others, co-operative, and sympathetic. He is not sulky or jealous, and is usually at ease in his relationships with adults. "He is a self-assured, conforming citizen in his kindergarten world. . . . He accepts the social scheme."⁴

However, because he is immature, the kindergartner often has difficulties in relationships with his age mates. Even the happiest of children gets into trouble when his needs and the social pattern conflict. As we have pointed out in an earlier chapter, kindergarten children quarrel with others less frequently than younger children do, but nevertheless conflict takes place fairly often. The quarreling that goes on in any group is a necessary part of social development; it represents a forward step in learning to get along with others. The child is still at a stage of trial and error, but he has advanced somewhat beyond the stage of relying exclusively on physical violence to settle his problems.

Growth in social living is a slow process, with many regressions to earlier modes of behavior all along the way. But understanding adults allow children plenty of time to grow from one stage of maturity to another. They do not subject children to adult standards before they are able to accept them. Fortunately,

⁴ Arnold Gesell and Frances Ilg, *Infant and Child in the Culture of Today*, New York, Harper, 1943, pp. 36, 354.

the child's development is always toward increasing maturity in the ability to handle situations involving social relationships. As he grows older, regressions become fewer, and the child becomes more truly a "socialized" being.

Social development and adjustment cannot proceed in a vacuum; the kindergarten must provide an atmosphere conducive to growth in this area. It can do so through a well-planned program of work and play in which children are given freedom and opportunity to express their ideas, a chance to plan, and responsibility for carrying out their plans and evaluating the results. In such an atmosphere, children learn to recognize and face the problems of living with others, to plan how to solve their problems, and then to attempt a solution. In this manner the kindergarten helps the child to become independent and concerned with the needs of others.

In the process of social development, the ideas that the child develops about himself are extremely important because they determine to a great extent his interpersonal relationships. His relationships with others, in turn, greatly affect this "self concept." If a child does not like himself, he will probably be unable to like others. If a child believes himself unworthy of the respect of his parents and teachers, he may become quite unable to respect others.⁵ A circle of cause and effect operates: the child's concept of himself also helps to determine how he relates to others. If the child has developed an unsatisfactory picture of himself, he will probably have difficulty in his relationships with others. This difficulty in turn reinforces his unsatisfactory self concept, which, in its turn, increases his inability to get along.

As the child matures he comes to take on toward himself the attitudes that others hold toward him. His self concept comes to mirror the responses that other people make to him, and this self concept continues throughout life. However, English⁶ points

⁵ Horace English, *Child Psychology*, New York, Holt, 1951, p. 439.

⁶ *Ibid.*

out, though the child's view of himself is "social" to the extent that it largely reflects the reactions of others to him, it is still unique, since it is based upon all such reactions that he as an individual has experienced in social living.

The child begins to develop a self concept during the pre-school years. At this time, therefore, he needs much help and guidance in his social relationships. The teacher plays an important role in the process of socialization by helping children to discover their resources and limitations. She is the central figure in countless situations which can help the learner to understand and accept himself or which can bring humiliation, shame, rejection, and self-disparagement. She can assist the child in his social development both by direct teaching and by providing the kinds of environment in which desirable social behavior can develop. When the teacher helps the child to succeed in what he is doing she is helping him to develop concepts of a successful self. If she continually subjects the child to situations in which he experiences only failure, she may reinforce his already developed concept of an unsuccessful self. The first method helps the child to develop a picture of himself as a worthy member of his group. The second increases the possibility of failure and develops within the child a self concept which makes him feel alien to the group.

The social-studies activities of the kindergarten can help the child to achieve personality integration, social intelligence, and sensitivity by providing an educational program so designed that living in school becomes democracy in practice. The social-studies activities in the kindergarten curriculum offer the best opportunity for developing social skills and attitudes because in this area content, process, and techniques are integrated. Children do not learn how to live with others harmoniously and comfortably by talking about it or by listening to the teacher talk about it; rather, they learn through a program of experiences in which they meet and solve problems democratically in a group situation. In these

experiences as a functioning group member, the child learns the reactions of others to his own behavior and has many opportunities for developing social sensitivity. We shall have more to say about developing the ability to live with others in Chapter 13, "Learning the Ways of Democracy."

Learning About the Environment

Research on how children develop gives us clues as to how the school can help the child to learn about the social aspects of his environment. We know that the needs and interests of the very young child are intensely narrow and personal. He cannot comprehend much beyond his own immediate environment. The young child enters school with a very limited understanding of the physical world and the world of people, and this he has acquired in his home and in the limited play experiences he has had before enrolling in the kindergarten. The social-studies program begins where the child is—with experiences centered around the family, the neighborhood, and the community. The goal of the program is to clarify the problems of living and, especially, to help the child understand his role in relationship to the group.

The neighborhood is the first social-studies laboratory for children. They identify themselves with the workers in their environment—the fireman, the postman, the milkman. Everything that moves catches their interest—the airplanes that fly overhead, the train they see racing by, the automobiles passing through the street. Social-studies experiences are concerned with these aspects of contemporary life, on the child's level of understanding.

The young child has great interest in the people about him, especially adults. This interest is a potent force in his socialization and learning to understand the world about him. Children are constantly assuming adult roles and imitating the activities in which they see adults engaged. This tendency accounts for much of the dramatic play of kindergartners and provides the basis for

many centers of interest of a social-studies nature. After a train ride, for example, children come back to the kindergarten eager to draw a train, to construct one out of blocks, to sing a "train song," to play engineer. When the child is engaged in this meaningful and purposeful activity, "he thinks actively, he solves problems, he talks vigorously, he reacts intelligently, and he gains new concepts."⁷ Imitation thus becomes an important method of learning.

Excursions

Trips into the community play an important part in the social-studies program, for they give children first-hand experiences with many aspects of the environment of interest to them. What is perhaps more important, they also take advantage of the role the community can play in the education of the child. Modern philosophies of education emphasize the responsibility of the school to acquaint children with their environment; but the community can itself become an educative force, a workshop for the school.

School-sponsored excursions give children an opportunity to explore and study local resources which cannot be brought into the classroom. By visiting and discussing the fire station, the post office, the grocery store, or the shoe shop, the child learns how people are dependent upon one another, how each person contributes to the welfare of the group by his work. Four- and five-year-olds usually do not come to school with this information; the policeman at the corner is the only representative of organized society most children of kindergarten age know. Excursions through the community arranged by the school as well as those he makes by himself should also help the child to develop concepts concerning property and property rights, and should make all aspects of his environment increasingly meaningful to him.

⁷ *Social Education of Young Children*, Curriculum Series No. 4, Washington, D. C., National Council for the Social Studies, March 1950, p. 19.

The community holds countless potentialities for education in the social-studies area; the problem is to select those experiences which are most appropriate and which will be most rewarding for the children.

An excursion that is educationally valuable need not be a long journey. For the young child, it may mean going no further than around the block to visit a grocery store or downstairs to the school basement to see the furnace room. To the kindergartner in his initial attempts to adjust to school life, excursions in and around the school may be more valuable than trips to more distant or unfamiliar places.

The educational value of an excursion depends on how well it is chosen, planned, and carried out. An experience of this kind is worthwhile only if it teaches something. Some things are taught best in the classroom; other things can be taught most effectively beyond the confines of the classroom and therefore should be taught there. Excursions are valuable if they furnish experiences that are more worthwhile and clarify concepts more effectively than other methods of teaching could do. If the children are interested in trains, for example, a trip to the local railroad station will answer their questions more fully and accurately than any other activity. To introduce kindergartners to the world of books, a "visit" to the classroom library corner, where children can explore materials with few restrictions, may be more effective than an excursion to the public library.

Planning a trip can be as valuable a learning experience as the trip itself. The group ought to discuss what they are going to see, what they especially wish to find out; perhaps they might make up a list of questions which they would like to have answered. This list should be quite short and simple; it might consist of only one or two questions for immature children and no more than five or six for older ones. If children are planning a trip to a farm, for example, they might wish to list such questions as these:

- What do cows eat?
- Where do the cows sleep?
- Who milks the cows?
- Do pigs eat the same food as cows?
- What kind of a house do chickens live in?

Making up such a list not only helps the children to organize their thinking but also demonstrates one of the functions of written symbols. (As we have pointed out, any writing the teacher does should be in manuscript since that is the kind of writing children will be expected to do in first grade.)

Group behavior should also be discussed before the trip. Some teachers provide time for such discussion a few days before the trip and then have a brief "review" shortly before the actual departure. Most kindergarten children are eager to co-operate, but they forget their responsibilities easily. And a few children may need special help in learning how to act in a group situation. Children are capable of giving good suggestions on how to make a trip most comfortable and worthwhile. If the group will be walking, they may suggest that a few responsible children be appointed as "back captains" whose job it is to keep an eye on stragglers. (The teacher, of course, will not depend entirely on children to carry out such a job, because the welfare of children is her concern. But children can help.) The group may suggest that each child choose a partner with whom to walk side by side so that the line does not become too long. The group may even wish to appoint a few children to remind those who forget to adhere to some of the rules that they have set for themselves.

Often parents of kindergarten children are willing to help the teacher either by looking after children on the trip or by providing transportation. Teachers should make sure that parents are aware of the liabilities involved when they offer to transport children. Specific liability laws vary somewhat from state to state, but it is clear that no one should be allowed to transport children unless he is a careful and experienced driver and carries sufficient

insurance to protect all parties in the event of an accident. Teachers who transport children also may be held liable in an accident if it can be proved that they were negligent. However, in states which have "guest statutes," persons riding as guests without sharing expenses with the driver or paying him in any way cannot recover damages in an accident, except in "extreme cases."⁸

If children are being taken through an industrial plant, obviously extreme care should be exercised to prevent accidents. The children should form small groups for the excursion and one or more teachers, plus a qualified company employee, should accompany each group. In conducting excursions, as in other supervisory situations, the teacher has the legal obligation to exercise "reasonable care" to prevent injury to pupils in accidents.⁹

In fixing liability, some states distinguish between two types of excursion. A visit to a commercial enterprise may be beneficial to children in the sense that it teaches them something concerning the operation of the enterprise; it may also be of benefit to the host organization because it constitutes good advertising and builds good will. For this reason, children are often given "sample" ice-cream cones at a creamery, for example, or cookies at a bakery. On the other hand, a group may make a visit from which no one other than the children benefits. A visit to the police station or to the post office may be classified in this second category. In the first instance the children are considered "invitees to whom the host organization owes reasonable care as to their safety." In the second, the host organization has no obligation to the children except the obligation to eliminate hazards which might endanger them.¹⁰

Permission, preferably in writing, should be obtained from

⁸ Robert R. Hamilton, *Rights and Responsibilities of Teachers*, Laramie, Wyo., School Law Publications, 1956, p. 40.

⁹ *Ibid.*, pp. 37-38. Legally, the teacher can be held liable for any negligence on her part. However, there have been no cases in which attempt was made to recover damages from the teacher; all such suits have involved attempts to recover damages from the host organization.

¹⁰ *Ibid.*, p. 38.

parents before taking children on a trip of any length. Sending a letter home serves the double purpose of telling parents about the activity and at the same time requesting their permission for their child to participate. Although these slips may have little or no legal significance, they at least are a written record that the parent knew where his child was going. Memories are fallible things, and permission should not be sought by telephone or in casual conversation. The teacher should keep permission slips on file for some time in case any questions arise after the trip.

School principals also need to know where children are. The teacher should discuss the excursion with the administrator before making final plans and, just before departure, should give him a record of the trip, the mode of transportation, and the names of children participating.

If the group leaves from the school grounds, it is customary to return the children there after the trip, even if their return is after school hours. Needless to say, parents should be informed about the time of return so that they can come for their children, and no teacher should leave the school grounds until all children have been taken home.

Any excursion that is worth taking is worth the expenditure of time for some follow-up activities. The learnings resulting from the trip should be applied to the problem which inspired it. For kindergarten children, follow-up might take the form of a discussion eventuating in some expressional activity, such as painting, drawing, clay modeling, building, or dramatic play concerned with some phase of the experience. After a visit to a chicken hatchery, for example, children may want to make their own picture book of the trip, from the time of leaving the kindergarten until their return. Mature children may compose a simple one-line "story" and ask the teacher to write it under their pictures. Then they may put all the pages together in proper sequence and place their book in the library corner so that they can refer to it along with their other books. These activities will help children to clarify their ideas about the trip and to refresh

their memories—for example, of what the incubator looked like or what color the chicks were. Expressional activities can thus be an excellent means of making excursions meaningful educational experiences.

Many other valuable learning activities may be inspired by excursions. A trip to the harbor, for example, might inspire children to construct a boat; a trip to the fire station may call for building a fire station and truck in the kindergarten. Part of the group may want to do some building and others may prefer to contribute in some other way. While some children are constructing a grocery store, others may "make" money, paint signs, or mold fruit from clay or papier mâché. All these activities are ways of consolidating and increasing the children's understandings of their social world.

Holidays

The celebration of holidays is an important activity in the kindergarten. Some schools, in fact, have instituted what amounts to a "holidays-and-seasons curriculum, which combines the skills with some attention to what children in general are assumed to be interested in."¹¹ Perhaps the chief value of this activity in the kindergarten is that it is immensely enjoyable for children. But it has other values as well.

Holidays and seasonal observances provide excellent opportunities for creative activity of all kinds. On Valentine's Day and at Christmas the children make cards and gifts for their families and friends. At Halloween they plan and sometimes make their costumes—and have the added fun of dressing up. And every holiday and seasonal change provides ideas for redecorating the kindergarten room.

The celebration of holidays, even birthdays, also provides an excellent opportunity for teaching children certain social

¹¹ Roma Gans, Celia Stendler, and Millie Almy, *Teaching Young Children*, Yonkers, N. Y., World Book, 1952, p. 81.

values and conventions. Through planning parties, room decorations, and other holiday activities, the children learn to cooperate in carrying out group goals. They also learn the roles of host and guest. By participating in the celebration of national holidays, the child learns something of our American heritage and way of life; he begins to identify himself with customs and traditions that are understood by everyone he knows. He begins to feel that he is part of a larger social group, that he belongs. And the development of this sense of belonging is one of the major objectives of the social-studies program in the kindergarten.

As the child learns some of the customs and institutions associated with the celebration of holidays, little by little he "begins to abandon his earlier, childish notions of what makes things tick in favor of more mature ones. As a sociologist, he learns certain attitudes toward property and authority; as an anthropologist, he learns that people may differ in color; as an economist, he learns that we have to have money to make purchases and that not all people have enough money to buy everything they want. Little by little the pieces of the mosaic fit together, with some pieces being discarded as the child sees they are misfits."¹³

Holiday celebrations, as the quotation above suggests, also provide opportunities to teach tolerance, respect for the individual, and other democratic values. In any kindergarten group, there will be some children from homes in which Christmas is not celebrated and who therefore do not wish to participate in the Christmas activities at school. The needs of these children can be met rather easily at the kindergarten level. Just as in the ordinary kindergarten day some children pursue an interest in fire stations in one corner of the room while others color, paint, or model clay, so at Christmas time children need not be made to feel "different" because they pursue interests other than those related to the holiday. Occasionally a problem might arise if a child whose parents have forbidden his participation in Christmas

¹³ *Ibid.*, p. 219.

activities wants very much to do what other children are doing. In such a situation, merely talking to the parents and giving them an opportunity to express their views may help to solve the problem. Jewish children, who also have a religious festival near Christmas time, might be encouraged to share their traditions with the other kindergartners. During singing time children might learn some of the songs associated with the festival of Hanukkah as well as traditional Christmas carols. Hanukkah is also a happy time for children when gifts are exchanged, and some of the joyous yuletide feelings characterize the celebration of this Jewish festival. Foreign-born parents might be willing to come to the kindergarten to teach the children some of the songs and customs associated with the celebration of Christmas and other holidays elsewhere in the world.

The celebration of Christmas provides a real opportunity for teaching children the satisfaction of real "giving." "Fours" and "fives" are not too young to save out a dime ordinarily spent for candy to buy a Christmas gift. It might mean much in their social growth to give a less fortunate child a toy that they like very much—not a favorite one, because that is too much to ask of such young children, but one that they still enjoy. Kindergarten teachers usually encourage and provide opportunities and materials for children to make simple presents for their parents and friends. A word of caution here—the gifts must be simple or they will be teacher-made rather than child-made. Not only will this increase the teacher's work load at an already busy time, but much of the real value of such an activity is lost if the teacher does most of the work. Suitable gifts for children to make include such items as a "match scratcher" (sandpaper on a block of wood), a calendar, or a paper weight.

Few young children are capable of appreciating the full religious symbolism of Christmas, but its celebration looms large in the lives of most four- and five-year-olds. Kindergarten teachers are frequently faced with a problem in deciding whether to take down Christmas decorations when the children leave for vacation

or to permit them to remain until the school resumes again. Children usually return to school still so excited about Christmas that they may be somewhat disturbed if the holiday decorations have been removed. Usually children continue to paint and draw Christmas pictures long after the holiday has passed.

Halloween has an appeal for children that is perhaps out of proportion to its educational value. Because of the costumes, pranks, and general fun associated with it, it excites children more than other special days and perhaps its celebration is noisier. But even this interest can be used effectively in furthering the child's development. Discussion of better ways of celebrating the day, of the need for respecting the property of others, and of safety in the use of matches for jack-o'-lanterns, and the creative activity of making masks and costumes, carving out a jack-o'-lantern, or decorating the classroom for a party all can be part of Halloween.

Even kindergartners are able to bring some understanding to the harvest festival of Thanksgiving, which can be related to nature study and other activities carried on in the fall of the year. Four- and five-year-olds do not have the fully developed sense of time needed to understand history, but they have at least a vague understanding of the past. Even young children enjoy the story of the holiday. If they cannot appreciate its historical significance, they can usually find ample reason for thanks in their own life—thanks for things within their understanding.

Valentine's Day, although it is not a holiday primarily intended for children, holds great appeal for them and offers many opportunities for creative work and for sharing. Giving and receiving valentines is an activity children look forward to eagerly. However, teachers of young children need to make sure that no child is left out of the valentine exchange. Most parents are willing to co-operate; providing each child with a list of the other children in the kindergarten will generally ensure every child a valentine. And certainly the teacher herself should give one to each child. The prospect of exchanging valentines often leads to

an interest in the post office which may in turn lead to an excursion and to a new and important center of interest. In this way the celebration of the holiday can be combined with a very practical activity.

Although the *religious significance* of Easter is beyond the understanding of most kindergartners, they can appreciate the joy that the springtime season brings. Many centers of interest can be developed around Easter and spring activities. Planting a garden, making Easter hats, building a hat store or flower shop, painting the bright new flowers and the Easter bunny, creating Maypole decorations—all manner of activities can evolve at this time of the year.

Every holiday, including birthdays, provides an opportunity for a party. By participating in such an activity, children learn the roles of guest and host, social skills which take on increasing importance as the child matures.

Many kindergartens make much of birthdays, using the day to give special recognition to the "birthday child" as well as to teach him his role as host. Children whose birthdays come during the vacation may "choose" a day for their birthday so that all have an opportunity to celebrate. This does not mean that the "birthday child" must necessarily give a party at school; not all families are financially able to permit their child to do so. But an imaginative teacher can make the day special by using colored napkins at the regular lunch time, by placing the child's name on the room bulletin board, or by providing a cake, real or artificial, so that the "birthday child" can blow the candles out as the group serenades him with "Happy Birthday."

Parties also provide an opportunity for simple cooking, an activity which virtually all children, boys as well as girls, enjoy. Now that various easy-to-use mixes are available, even young children—under the teacher's guidance, of course—can make hot chocolate, cookies, or even a cake. Preparing the food themselves adds immeasurably to children's joy in the party.

Whatever the holiday, in the kindergarten, preparation for

its observance should be brief, and the celebration itself should be simple. Children of kindergarten age do not really appreciate many of the elaborate arrangements that are sometimes made for such celebrations; it is often the teacher, rather than her charges, who enjoys them. It should also be remembered that, although the symbolism, myths, and legends of festivals, when interpreted wisely and simply by the teacher, can provide a meaningful background for the observance, few kindergartners are capable of really understanding the meaning of holidays. Further, as we have pointed out, some children come from homes which are unsympathetic or antagonistic toward the content of certain holidays, especially religious festivals. For this reason, as Forest¹² remarks, "it seems advisable to present certain of the more important festivals simply for the fun and good fellowship which they have come to represent, and not for the historical, artistic, or religious values for which they stand."

Problems for Discussion

1. Plan an excursion for twenty-five children to the local post office and one to an ice-cream plant. What differences might there be in planning for these trips? How might legal responsibilities differ in the two situations?
2. Mrs. Todd has among her kindergartners an unusually small boy and an unusually large girl in whose presence she makes such comments as "Jane is so big and awkward" or "Jim is such a tiny thing." How might these remarks damage these children's self concept?
3. It has been said that a "concept of society" does not exist in four- and five-year-olds. What does this mean? Do you agree with the statement?
4. How would you go about celebrating Halloween in the kindergarten? What activities might you include?
5. Assume that you are teaching in a community where there is a large non-Christian population and that the mothers have asked you to lead a discussion relative to Christmas activities in the

¹² Forest, *op. cit.*, p. 172.

kindergarten. What are some of the points you might consider? Would it be better for you to talk or to let the parents talk? Why?

Suggested Additional Reading

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12. Health and Safety

Many educators today regard the teaching of health and safety as an integral part of the social-studies program in the kindergarten. We have chosen to treat the subject in a separate chapter only to give greater emphasis to this important part of the kindergarten curriculum. Actually, it makes little difference whether the resulting learnings are labeled "social studies" or "health and safety." The important thing is that the school must recognize its responsibility to establish basic attitudes, habits, and skills regarding health and safety through the daily activities in the classroom, elsewhere in the school building, and on the playground.

The Health Program

The health program in the kindergarten is concerned with the child's future as well as present state of health, and with his mental and social as well as physical well-being. The kindergarten therefore makes a many-pronged attack on problems of health. Through its various diagnostic services, it tries to identify health deficiencies early in the child's life, before they have a chance to develop into permanent disabilities. By providing a controlled, healthful environment, and by instructing children—

and sometimes their parents as well—in the principles of healthful living, it tries to lay a foundation for the continued well-being of its pupils.

The Teacher and the Health Program

The success of any health program in the kindergarten is dependent to a great extent on the teacher. In some schools, she is the person who initiates health activities or performs health services; in others, she helps the school nurse or physician give inoculations or medical and dental examinations. Even in kindergartens which have the services of a nurse or physician, the teacher often does at least initial screening for general health, and for visual and hearing defects. She may also be charged with the responsibility of measuring the height and weight of children at regular intervals and entering health information on their cumulative records.

Any program instituted for the health and welfare of children assigns to the teacher greater responsibility for observing children than a formal "morning inspection" implies. Although such daily inspection still exists in some schools, it has been replaced in others by an informal and unobtrusive observation of children to detect evidences of communicable disease or other illness in children. If the teacher notices symptoms which in her opinion indicate that the child needs medical attention, she refers the child to the nurse or physician.

The teacher's observation of children needs to be careful, accurate, and continuous—throughout the day, week, and school year. The teacher is perhaps the key person in the detection of deviations from normal health. She knows the children in her room better than the nurse or the physician do. Although she is not qualified to diagnose illness or to prescribe for it, she can learn to recognize the symptoms of some of the more common communicable diseases.

Often the teacher bears the major burden of dealing with

the parents of children who have physical, mental, or emotional defects or who are suffering from inadequate or insufficient diet or rest. In many instances, it is she who must take the responsibility of persuading the parents to get help for their children and even of educating them to the child's need for proper food, rest, and medical attention. When children's parents are unable to pay for necessary health services, the teacher very often is the person through whom community agencies work to supply what is needed.

Teachers need to become skillful in working with parents; they need to recognize that to the parent any attempt to change a child's faulty habits may be taken as a personal criticism, unless the parent is a part of the changing. In planned conferences or informal conversations with individual mothers and fathers, the teacher may note that "Tommy seems to tire easily" or that "Jane has more than her share of colds." Merely giving the parents an opportunity to discuss the problem will often produce desired results. If the teacher's attitude is too impersonal and aloof, parents may be reluctant to co-operate. But if she bears in mind that some parents have many problems in providing for their children, and if she works with parents as she does with children, using generous amounts of praise for what the parents have been able to accomplish, she will establish good relationships in most of the homes of the children she teaches.

In addition, it is the responsibility of the teacher to plan schedules conducive to child health. It is she who plans for periods of rest and relaxation, for play and other healthful activities. And, as we have previously pointed out, she is also responsible for the general emotional climate of the classroom, which can have great effect on the mental health of children.

The Health Status of Kindergartners

Both from special studies of physical defects among school children and from observation, we know that large numbers of

children in school today have decayed teeth, defective vision, hearing, or speech, and borderline malnutrition.

Children come to school with varying concepts and habits regarding health and safety, depending on the experiences they have had in their home environment. Many uneducated or foreign-speaking parents are unwilling or unable to provide the school with adequate health histories. Some families are receiving inadequate medical attention because of poverty or ignorance; they may not even know what communicable diseases their own children have had. Children of such homes may have previously undiscovered physical defects—some of a remedial nature and some of such long standing that they may become permanent handicaps. Families in every income bracket neglect the dental health of young children.

As Breckenridge and Vincent² point out, the poor physical condition of low-income children stems from more factors than their food, shelter, and medical care. The parents of these children may themselves be suffering from long-term malnutrition and chronic disease and therefore lack the vigor and ambition necessary to improve their condition. Some are of relatively low intelligence, which prevents them from understanding and providing for the needs of their children. "The poor physical condition of children in low-income families may therefore be due to a complex of hereditary, nutritional and social factors."

Even at the age of four or five, some children have become nutritional problems. Many school children, especially those from low-income families, are not receiving an adequate supply of vitamins A, B, and C in their diets. Some children have acquired faulty eating habits not because of their parents' inability to provide a well-balanced diet but because they have been allowed to eat pretty much what they please. One recent survey found that 40 to 85 per cent of the children studied were deficient in vitamins, proteins, and other essential food elements. Children

² Marion Breckenridge and E. Lee Vincent, *Child Development*, Philadelphia, Saunders, 1955, p. 187.

from high-income homes were found to be only slightly superior in dietary habits.²

For children who are inadequately nourished, the school lunch program may make the difference between an adequate and an inadequate diet. In one city it was found that 70 per cent of the children who ate a school lunch had an adequate diet as against 50 per cent of those who either carried their lunch or went home for it.³

Unless a kindergarten child is in attendance all day in a school with a low-cost lunch program, there is little that the school can contribute directly to the malnourished four- or five-year-old. It can, however, do much to educate parents. This means helping low-income parents understand how to spend most wisely the money they have available for food. For all income groups, it means helping parents to understand the child's need for certain basic foods in his diet. Many parents—and educators as well—believe in "the wisdom of the child's own appetite," i.e., that if left to choose his own diet the child will include all the necessary food elements. This concept has helped parents learn to treat eating more casually. Unfortunately, however, some parents tend to forget that the basic food elements must be available for choice, and that providing too great an abundance of highly sweetened or rich foods will take the edge off the child's "natural" appetite. Sometimes parents unwittingly teach children to overvalue candy and desserts by offering them as bribes for finishing the rest of the meal.

Parents may have to be helped to change their own poor eating habits as well as their child's. They also should be made to understand the need for making mealtimes pleasant. Many children, particularly in small families, are teased, cajoled, threatened, and otherwise harassed during meals. The parents become

² Blanche Bobbitt, *Progress Report on Public School Health*, Sacramento, Calif., California State Department of Education, April 1956.

³ Elizabeth Lockwood, "Educational Implications of Clinical and Research Findings in Nutrition," *Journal of School Health*, September 1949, XLX, 180-85.

anxious concerning the child's lack of appetite and communicate this anxiety to the child—thus actually increasing the problem.

Needless to say, whether or not the child is at school for lunch, he should be fed if he comes to school hungry. Most schools are able to make some special provision for such children, and most kindergartens provide juice and crackers or some other light snack during the kindergarten day. This is especially important for children in the morning session because, as we have pointed out earlier, kindergarten-age children are usually poor breakfast-eaters.

Some children come to school having had inadequate rest or sleep. Although there may be wide variations in the needs of individual children, most kindergartners require about eleven and a half to twelve hours of sleep.⁴ This appears to be a greater amount of sleep than most children get; in fact, children may actually get less sleep than parents report, since bedtime does not always coincide with sleeptime.

The rest period provided in most kindergartens about mid-way through the session will help to take care of at least part of the rest needs of children. Some kindergartners will fall asleep at this time, and if there is a special room for rest, these children may be permitted to continue sleeping after the others have gotten up. Lacking such separate facilities, the kindergarten teacher can help children who have not had adequate rest by protecting them from over strenuous activity during the school day. The teacher can also help by trying to make parents understand their children's need for rest. In many homes children are forced to rise early because of the working schedules of other members of the family. In families with older children, it is often difficult to get kindergartners to bed at a reasonable hour. The kindergarten teacher can make parents more aware of the signs of fatigue in their children, and she can help them to plan for meeting their children's rest needs.

⁴ Ruth E. Grout, *Health Teaching in Schools*, Philadelphia, Saunders, 1953, p. 193. (Now in revision.)

Teaching Health Principles

Among the major aims of any school health program are maintaining and improving child health. In order to accomplish these objectives, the school must recognize the fact that "no child who has reached the age of reason can be kept healthy and safe solely by what is planned and done for him. His continued well-being depends in large part upon what he himself feels and thinks and does." * The child himself needs to be educated in healthful living.

With kindergarten children, as we have pointed out, health education begins with the establishment of healthful routines of living, resting, playing, keeping clean, and eating. Some of these routines can be established in the kindergarten; others call for the co-operation of parents. Health education also involves imparting certain information to children to change their behavior.

Education, in health as in all other areas, begins "where the child is" in his understandings, with material drawn from his own daily life. The state of New Jersey suggests the following experiences as opportunities for introducing learnings in health in kindergarten and elementary school: *

1. Health examinations in school, including weighing and measuring.
2. Epidemics of childhood diseases, colds.
3. Quarantining of children because of illness.
4. Vaccinations, inoculations.
5. Illnesses or operations.
6. Going to the dentist.
7. Need of some children for glasses.
8. Misinformation in advertisements, e.g., in advertisements of patent medicines.

* George Wheatley and Grace Hallock, *Health Observation of School Children*, New York, McGraw-Hill, 1951, p. 10.

* *Building Citizenship in a Democracy Through the Social Studies*, Elementary School Bulletin No. 10, Trenton, N. J., Department of Education, 1945, p. 72.

9. Reading about recent medical discoveries.
10. Deaths occurring in community, discussion of statistics concerning causes of deaths.

Needless to say, some of the understandings involved in these activities are beyond the grasp of kindergartners. However, most young children have had some experiences in these areas and much meaningful learning can arise by using them as a starting point in teaching principles of health. For example, after the children have been weighed and measured they might like to talk about "growing big" and how it comes about—the role of food, rest, and play in growing bigger. If many children are absent with colds, the teacher may initiate discussion of how diseases spread and what children can do to protect themselves and others from infection.

The teacher of kindergarten children must be satisfied with very small beginnings in some instances. For some children she will have to start with the most fundamental rules of keeping clean. In almost every kindergarten there will be a few children who come from homes in which the need for cleanliness is not considered so important as most teachers believe it to be. Some children may need very direct help in washing their hands and faces before they begin the day and before eating.

In the kindergarten, the teacher will help children learn to rest, to avoid contagion, and to develop strong bodies through adequate exercise and proper diet. Young children cannot grasp the meaning of such abstract terms as "health." Health concepts must be introduced in concrete, practical situations.

Children can acquire the "mental set" essential for healthful living through discussion of the school's nutritional program. In some schools children are allowed to participate in planning their own lunches. Such a plan not only helps children to learn food values but can also do much to solve eating problems; if they have had a hand in planning what to eat, children may cooperate more readily in eating. Introducing children to new

foods is often a difficult problem. But even at the age of four or five, the child can be taught at his own level of understanding what his health needs are and can participate actively in efforts to meet these needs.

The kindergartner should make the acquaintance of the school nurse at the earliest opportunity, so that his first meeting is not an unpleasant one occasioned by a cut or some other health need which may cause him pain in treatment. Children can also acquire important health learnings through discussion with the teacher or school nurse of the program of immunization, of the need for exercise and rest, and of the work of the school dentist.

The kindergarten teacher may use the child's interest in dramatic play to help him over some of the "humps" in the school health program. Few children enjoy inoculations, but if children are given an opportunity through play to express their fears and apprehensions as well as to learn procedures, some of the problem may be solved. Being "permitted" to express fear may be of real help to the child who feels he may lose face with the group if he cries. Acquainting children with procedures will help the nurse and doctor as well as the children; medical attention can be given more efficiently if it is not necessary to remind each child to get in line, bare his arm, etc. Some dramatic play after these experiences may also help children to release tensions. A skillful teacher might even be able to use such a situation as a point of departure for discussion. Children who ordinarily have little to say might find much to talk about after they have been inoculated.

Providing Health Services

As Wheatley and Hallock¹ point out:

No child can get rid of an already existing defect or infection or chronic illness merely by knowing and practicing the rules of healthful living. The child who learns in school that milk is an

¹ Wheatley and Hallock, *op. cit.*, p. 10.

diet, rest, work, play, and disease. Health education is successful only if it results in improved healthful living for the child, his family, and the community in which he lives.

Teaching Habits of Safety

Like health instruction, safety instruction for the young child comes out of the child's daily experiences. Teachers in the kindergarten use every opportunity to teach principles of safety. When children are in the school corridors, the teacher points out the need for walking rather than running. She shows the children how to use scissors and other kindergarten equipment properly; she helps them understand the danger of running into the street. Much safety instruction also can be presented through stories and discussion.

The Association of School Administrators has formulated the following safety objectives for the elementary school: *

1. To help children recognize situations involving hazards.
2. To develop habits of conduct which will enable children to meet situations of daily life with as little danger as possible to themselves.
3. To develop habits of carefulness and obedience to safety rules at home, on the streets, in school, or at play.
4. To teach children to read, understand, and obey safety rules and regulations.
5. To teach children safe conduct in the use of street cars, private automobiles, and busses.
6. To develop habits of orderliness and carefulness in the use of playthings, tools, common articles of the home and school, and in the use of fire.
7. To develop alertness, agility, and muscular control through rhythmic exercises, play, games, and other physical activities.
8. To teach children to cooperate to prevent accidents and the taking of unnecessary risks involving physical dangers.

* *American School Buildings, Twenty-seventh Yearbook*, Washington, D. C., National Education Association, American Association of School Administrators, 1949, p. 67.

9. To develop wholesome attitudes concerning: (a) law and law enforcement officers; (b) the safety of themselves and others; (c) organized efforts to assure safety for all.
10. To give children actual experiences in desirable safety practices.

In most of these areas, the kindergarten teacher can do little more than begin to give children some understanding. But she can begin—and that is the important thing. Children can begin to recognize the hazards of matches, glass, and rusty nails; they can learn to exercise caution when descending stairs or crossing streets. They can learn to recognize—although they cannot actually read—signs, and they can learn to respect and obey people such as the safety patrol, the policeman, and the fireman, whose function is to safeguard their welfare. Many of the objectives listed above will not be reached until children are more mature, but the alert kindergarten teacher begins the safety education of children at the earliest opportunity.

Learnings in the area of safety should arise from the normal activities of the school day. Memorizing rules is of little value. The acquisition of new equipment, for example, can provide an excellent opportunity for teaching principles of safety in using and caring for toys and materials. Yet, although safety can be taught effectively through children's other school activities, this method ought not to take the place of a planned program of safety. Any school interested in the welfare of children establishes orderly procedures and policies regarding fire drills, first aid, and other emergency preparation. Even kindergartners can begin to understand these aspects of school living.

The school cannot control the home situation of children, but it should provide a safe and healthful school environment. If the child is to learn good health and safety habits, good teaching must be combined with an environment that practices the principles that are taught. Many schools—especially older ones—are less than ideal in this respect, but the teacher can make better use of existing facilities if she understands clearly the health

needs of children and her role in the health and safety program of the school. Helping children learn to walk safely down hazardous stairways and making effective use of the available natural lighting, for example, can make some difference to the health and safety of the children in such a school.

The kindergarten room itself must be safe. It should have sufficient light and space. Heavy objects should not be placed so that they might fall on children. All obstructions should be removed when children are playing running games, and radiators should have guards.

Kindergarten teachers should be especially careful that beads or other small objects which might roll under a child's shoe and cause him to fall are not left on the floor. Children should be taught to carry scissors or other sharp objects with the points down; they should be taught not to skip or run while they are carrying things. Good safety rules should be observed when using saws and hammers at the work bench.

The furniture used by children should fit them so that they can sit or work without discomfort. Because children vary in size, chairs of varying height should be provided so that all children are able to place their feet comfortably on the floor. Tables should not be so low that children's knees hit the table apron or so high that children are under strain when sitting at them. All cupboards and storage space should be within the reach of children and their contents so arranged that they are unlikely to tumble out and injure children.

Children should be reasonably safe on the playground. Ideally, kindergarten children should have a playground of their own. If this is not possible, play areas should be fenced in or at least so situated that children will not run into the street. Sufficient supervision so that younger children do not get hurt by older and larger children should be provided, and the use of heavy and potentially dangerous equipment should at all times be supervised. Equipment should be checked periodically to make sure that the wood in slides is not splintered, that the rungs

of the jungle gym are firmly braced, and that all other facilities are in proper working order and present no hazards to kindergartners. If playground equipment includes materials such as planks or crates, the teacher should make sure that no nails protrude. If the playground has a discarded automobile chassis, washtub, or any of the other makeshift articles children enjoy playing with, the teacher should check them for rust and make sure that there are no sharp edges to cut children or tear their clothes.

Most schools have a safety patrol made up of boys and girls in the upper grades who are given the responsibility of supervising young children crossing streets in the vicinity of the school. According to Otto, one sixth of all accidents to children in the age group from five to fourteen occur at street intersections.* Were it not for the work of the school patrol, this accident rate could well be much higher. They render an important service to the children of the school and the community. Kindergartners, of course, should be taught to obey the warnings of the patrol. They also need practical lessons in safety because many of them go to and from school unaccompanied, and at this early age a good percentage of them have not yet learned the caution necessary to preserve life and limb. The kindergarten can also introduce children to the policeman or fireman. Many children have been taught by adults to fear the policeman. The kindergarten teacher can arrange for visits by the policeman to the classroom to dispel any fears children may harbor and to show them that the policeman is a friend. Visits to the fire station can help children understand the function of this community helper.

Centers of interest that are both valuable and enjoyable can be built around safety practices. For example, the teacher might begin by teaching the group a song about the traffic lights—red for "stop," yellow for "wait," and green for "go." The song may lead to a discussion of proper behavior in crossing streets and

* Henry Otto, *Social Education in Elementary Schools*, New York, Rinehart, 1956, p. 105.

climbing up and down stairs, of what the policeman does, or of many other activities in which children engage or are interested. The group may want to take a walk to the nearest traffic light to observe the signal changes and the way in which pedestrians are protected by the lights. They can make their own traffic signs to use with bicycles or wheel toys in the kindergarten or on the playground. They can make drawings and paintings of traffic signals, of the traffic policeman, of pedestrians crossing the street. A member of the school patrol or a policeman may come to discuss safety practices with the children. Thus a center of interest is built around safety. Depending on the group, such an interest can branch out into many directions. Other safety areas provide an equally good opportunity to develop centers of interest.

Teachers and children can formulate standards of safety within their own classroom. Children are capable, at a very early age, of recognizing the need for caution in using scissors and other dangerous equipment, but they may need to be reminded. Going up and down stairs is an activity in which young children may experience difficulty. Making each child responsible for holding on to railings and walking carefully will help to eliminate accidents due to carelessness or running on stairways. Learning to share can have an important bearing on accident prevention, because children may hurt themselves while quarreling over equipment. If they are given opportunity to discuss the problem with an adult who understands them, most kindergarten children are capable of deciding how they can share materials and toys so that each has a turn and no one is hurt. Children should be encouraged to inform the teacher of any hazard to safety they observe. Discussing the problem and suggesting solutions can make them feel that they have a part in eliminating dangers. Small children should be taught to report accidents to the teacher immediately so that first-aid can be given. If children are commended for their efforts, they become very adept at spotting, picking up, and disposing of such hazards as nails, matches, and sharp sticks on the playground.

It perhaps should be taken for granted that teachers will set children a good example in habits of both health and safety. Teachers who keep themselves well are, other things being equal, better teachers. And certainly they should never violate safety rules that they wish the children to observe.

Problems for Discussion

1. Miss Farnsworth teaches kindergarten in a school located near a migrant labor camp. Miss Phillips teaches kindergarten in a neighborhood of professional people. Would the health program in these two kindergartens probably be different? *Necessarily so? Why?*
2. Mrs. Dodd has forbidden her five-year-old daughter to cross a street which she needs to cross in order to get home unless the school patrol is on duty. There have been occasions when that corner was not patrolled. As a result the child has become extremely fearful; she cries, and worries lest the patrol not be there when she goes home. How would you handle this situation?
3. Miss Otis has "health inspection" every morning, asking the children whether they have brushed their teeth and eaten a good breakfast before coming to school. Mrs. Rogers feels that this is an unwise procedure. On what grounds might Mrs. Rogers base her objection to Miss Otis' health-inspection plan?
4. In some schools, children who are apparently not being taught to brush their teeth at home do so at school with a brush provided by their parents or by the school. Do you approve of this practice? Why or why not? Will "transfer of training" necessarily take place?
5. Miss Palmer has prepared a chart listing the name of every child in her kindergarten. Children who come to school with clean hands get stars after their names. Miss Palmer says this method provides children with an incentive to keep clean and is therefore effective educational procedure. Miss Morton disagrees. Put yourself in Miss Morton's place and give your reasons for objecting.

Suggested Additional Reading

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13. Learning the Ways of Democracy

Education, it has been said, is a society's means of ensuring its perpetuation by producing the kind of individual who will personify and work to maintain the values of that society. The goals of education in any society, therefore, are determined largely by the role that the individual is expected to play. In a totalitarian society, for example, the citizen is expected, above all, to be obedient; the educational system therefore seeks to develop docility, conformity, and unquestioning acceptance of externally imposed rules of behavior. A democratic society, on the other hand, is based on the complex idea of co-operation among free individuals. Its educational system therefore has complex goals. It seeks to develop the individual to his full capacity—to make him independent, self-directing, and creative. And it also seeks to make him aware of, and capable of assuming, his responsibilities for the group welfare—his obligations to contribute to the group whenever possible, to accept the contributions, and respect the rights, of others, and at all times to be guided in decisions and action by the needs and wishes of the group of which he is a part. In Kilpatrick's words,¹ "We wish, as befits a democracy, a self-determining person, one not tied to the dictates or directions

¹ William H. Kilpatrick, *Philosophy of Education*, New York, Macmillan, 1951, p. 304.

of others, one who can himself make worthy and rewarding choices for his own living and for the common good."

The concept of democracy has far-reaching implications in guiding the growth of children. The goals we have described above are much more difficult to achieve than those of a totalitarian society; they cannot be taught merely by precept. If the child is to become a responsible citizen of a democracy, the school must serve as a laboratory in which the essentials of democratic living are practiced at all times. It must be an environment rich in experiences and materials to challenge the individual and stimulate his growth, but it must not penalize the child who develops more slowly than others. It must also emphasize cooperative behavior, by helping children to work together with common toys, teaching them to take turns, and encouraging them to share possessions and experiences with others. It must provide opportunities for developing leadership—and followership. And it must permit and encourage the child to make choices and assume responsibility for the outcome of his decisions from his earliest experience in school. Only through continuous practice in the ways of democracy can the child become the kind of citizen our society wants and needs.

Learning to Make Decisions

According to John Dewey,² "Full education comes only when there is a responsible share on the part of each person, in proportion to capacity, in shaping the aims and policies of the social group to which he belongs." For the kindergarten teacher, the key words in this statement are "in proportion to capacity." None of us would contend that four- and five-year-olds are sufficiently aware of their own educational needs to determine all the activities or experiences they should have as kindergartners. But few persons who have worked democratically with children would deny that even young children are capable of making *some* deci-

² John Dewey, *Reconstruction in Philosophy*, Boston, Beacon, 1948, p. 209.

sions regarding their own welfare or conduct. To help children become able to help themselves—to help them become self-directing individuals—is the ultimate goal of all education in a democratic society.

Few teachers would debate the importance of this goal. Yet many teachers seem unable or unwilling to give the child the practice he needs to develop this skill. Granted, it is often much easier and more efficient for the teacher herself to make whatever decisions need to be made. It would also be easier and more efficient for the first-grade teacher to write out each child's name than to teach him to do so, and for the fourth-grade teacher to solve the arithmetic problem than for her to teach the pupils to work it out. But is the writing of a name or the solving of a problem—or the making of a decision—the real goal? The answer, of course, is no; we want the child to have experience in all these activities—unsuccessful as well as successful experience—so that he will ultimately be able to write what he needs to write, to solve his own problems, to make his own decisions. So that, in short, he will become a self-directing individual.

Granted, too, that kindergartners are too immature to make all decisions or to direct themselves in all activities. But every child, even before he reaches the age of four or five, is able to do some thinking for himself, to solve at least some of his daily problems. In the beginning, the young child can solve only very simple and concrete problems, but as he matures he succeeds in increasingly complex matters. The teacher can help children develop skill in critical thinking by effectively guiding them in identifying individual and group problems, making and carrying through plans to solve these problems, and evaluating the outcome of their efforts.

In the kindergarten the child embarks on the transition from rather complete domination by adults to independence. Of course, some adult control is not only necessary for young children but highly desirable. Children need to have adults set the limits for them sometimes. They become confused and disturbed if no one

ever says "no" to them, if they are forced to rely on themselves as their only guide. It is a frightening experience for anyone, child or grownup, to be given more responsibility than he is ready for. But control should be exercised only to the degree necessary to ensure the health and safety of children and their acceptance of desirable behavior patterns. It must be the kind of control that extends the child's responsibility for his own behavior rather than restricts it, the kind that helps children to learn that responsible self-direction is more desirable and satisfying than being managed by others.

Such a concept of control requires a careful distinction between "authoritative" and "authoritarian" points of view. The former seeks to free the child, the latter to hind him. Authority plays a role in education—but that role is to develop independence in children. Football players do not object to their coach's use of authority in training them to be football players; they know that what they are learning will help them to look after themselves on the football field. We seek out authorities to help us learn to play the piano, to fly an airplane, to speak a foreign tongue. But our object in seeking these authorities is eventual independence; once we have achieved the goals that we have set, we no longer need the help of a pianist, a pilot, or a linguist. Similarly, the child who wishes to make a boat seeks the authority of his teacher to help him fit two boards together so that he can carry out his goal. But he seeks to learn so that the next time he will need no help—he wants to depend on himself. Many teachers, perhaps unknowingly, use their authority and prestige to make children dependent on them. Children who are constantly asking their teacher, "What shall I do now?" are failing to learn a very important skill: the ability to direct themselves.

Children learn to make decisions by actually making them. That would seem to be an obvious truth; no one would dispute that a person learns to play the piano by playing, to swim by swimming, to fly a kite by flying one. But making decisions is something less tangible than playing the piano; adults sometimes

believe that children will develop the ability to make their own decisions "with maturity." Maturity helps, of that there is no doubt, but practice is necessary, too.

Children should not be hurried into decisions. Democratic procedures are time-consuming, but what appears to be needless discussion may in reality be necessary to making intelligent decisions. If children are pressured into coming to premature decisions, they may come to depend on the teacher or the more vocal members of the group to make their decisions. Thus they become more dependent rather than more capable of managing their own affairs.

Children need daily opportunities to make decisions, to solve problems, even before they are capable of doing so effectively. As Caswell and Fosbay point out, "Mastery of tools and techniques does not precede their use in problem situations. Mastery is achieved as the tools are employed in dealing with situations. Conversely, problem solving is not something that can be delayed to a certain point in maturity; it has small beginnings, as do all types of behavior which must be nurtured from the child's first learning."^{*}

Children can grow in the ability to plan and organize only through many experiences in planning and organizing. The skillful teacher gives children many opportunities for making choices and assuming responsibility geared to their level of maturity. When more direct guidance is necessary, she gives suggestions rather than *commands or directions*, leaving the child free to accept or reject her ideas on their merits. The school can set up many "choice situations" for children, even kindergartners, so that they can learn to make decisions for themselves.

Children should also be permitted to experience the outcome of their own unwise, perhaps hastily made, decisions. For example, the group might decide to undertake a construction project which the teacher realizes is quite beyond their understanding

^{*} Hollis L. Caswell and A. Wellesley Fosbay, *Education in the Elementary School*, New York, American Book, 1950, p. 34.

and capabilities. If they are permitted to carry out their decision, the project will probably fail—but the undertaking as a whole need not be a failure. Children will learn much from the experience of working in the group on a common undertaking of their own choosing, and they will also learn something of the privileges and responsibilities of decision making. If the teacher forbids the activity, no such learning will take place. And if the undertaking is a success—so much the better. Not only has the group learned a great deal but so has the teacher!

Permitting children to make their own decisions may also result in many concrete learnings and in the effective "internalization" of those learnings. If, for example, the group dawdles a great deal, the teacher may try to coerce them into getting ready for story time. This method might be effective, for a while, but it produces no learnings since it is based essentially on fear of the teacher's displeasure. Or the teacher might try to explain the alternatives to children, helping them to examine all possibilities before arriving at their own decision. She might try to show them, by using the clock, that if they take a long time cleaning up after easel painting or if they choose to spend extra time in doll play, story time will become very short as a result. This method may or may not be effective; sometimes the teacher will spend much time explaining things to children to no apparent effect. But once they have experienced the result of their decision—a shorter story hour—they will be ready to appreciate the teacher's reasoning and to carry over this learning into other situations.

Children may need to find out for themselves whether living is more comfortable when things are put in their proper places or when everyone just drops what he was playing with at the end of the work period. Should children decide that a messy room doesn't bother them—and such a decision is possible—the burden would be on the teacher to take every opportunity to point out that "if the hammer were in its proper place we could find it," and "if the books were on the book shelf we would be able to find one to choose for storytelling." An alert teacher can demon-

strate to children in a very short time that they work more happily and freely in an orderly room.

With added maturity children should become increasingly self-reliant and responsible and should be allowed to participate in school-management duties appropriate to their age and experience. Genuine teacher-pupil planning means co-operative planning by teacher and child; it does not mean that the teacher somehow gets children to accept plans that she has formulated, that she "motivates" children to do what she has all along planned that they should do. Nor does it mean that children take over the job of the teacher. Rather, it means that children are given some opportunity to make decisions which affect their welfare.

There are many responsibilities which can be shared with children, but there will always be some things which teachers or administrators should do. It is not within the prerogative of children in most schools, for example, to decide on the number of fire drills during the year. That is the responsibility of teachers and administrators or possibly city officials. But children can help plan how to empty the classroom when the fire bell sounds. Kindergartners do not decide on their own curriculums, but they can help to plan specific experiences within a given framework. They do not decide whether language activities should be a part of the kindergarten day, but they can help to choose the story for storytelling time.

It is the task of the teacher to help the child make decisions which represent, for him, constantly increasing maturity in judgment. At the kindergarten level children may be mature enough to decide whether they will have crackers and juice for lunch or crackers and milk but not yet old enough or experienced enough to determine lunch needs beyond this point. At the third-grade level the child may be sufficiently mature to decide whether he should do a particular thing right now or defer it to a later time—but not whether it should be done at all. At the sixth-grade level he may be old enough to decide not only what to have for lunch but also whether he needs lunch—not only whether some-

thing should be done now or later but whether it need be done at all.

Kindergarten children may even be ready to help plan activities in the kindergarten. If rain makes the regular period of outdoor play impossible, children can help to reschedule the day's program. After discussion of various possibilities, they may decide that they would like to have an extra-long work-play period, or to substitute an organized game for the usual outdoor play. When a child has a birthday the group may want to plan the best time for the party. (To adults it may "logically" fall in the regular lunch time, but to children it may be more "logical" to omit the usual lunch time and have the party begin or end the day.) Sometimes the kindergarten is invited to participate in activities in other classrooms during what is ordinarily rest time. The group can help decide whether to shorten all periods preceding it and thus have a short period of rest or to eliminate rest altogether.

All these decisions need guidance, of course, and children may make mistakes. But the alert teacher can use these mistakes to good advantage. If the group has decided to eliminate the rest period and some of the children are overtired and irritable as a result, the teacher will discuss the problem with the class as soon as possible and remind them of the discussion the next time they are called upon to make a decision concerning rest.

Learning to Live in the Group

The teacher tries to make the child's initial experiences in the group pleasant and satisfying. A child will make little effort to conform to the wishes of a group in which he does not feel comfortable or adequate. As we have said, the social atmosphere for the young child must be facilitating rather than frustrating. Restrictions should be confined to the few simple rules necessary to make group living safe and rewarding for all the children. With increased experience and maturity, and with adequate guidance, children become more sensitive to the feelings and

needs of others and therefore more likely to get along well with their peers. When we encourage a child to take an interest in the motives and emotions of others, we are helping him to succeed in his social relationships.

In the modern school, where provision for group interchange is made, children learn the social conventions which we call "good manners" informally. If they are not imposed on children by adults, good manners are more likely to become part of children's behavior. It does not take even the young child long to learn that politeness and consideration for others are merely a means of easing human adjustment. Without a few rules of behavior there would be too much confusion for efficiency in work or enjoyment in play.

This does not mean, however, that the teacher needs to make the rules. Children are quite capable of self-discipline—and of disciplining others—if they are but given a chance to express themselves. Tearing books, for example, is a perennial problem in any group of young children. The teacher can decide on the penalty for such behavior, or the group can discuss the problem and arrive at an appropriate punishment. In such discussions, children need to be guided away from becoming personal—"We aren't talking about the fact that *Jimmy* tore a book; we are talking about what we should do when *anybody* tears a book." They need also to be guided away from prescribing punishments that are too rash. Some children have experienced rather drastic penalties for misbehavior at home and may reflect their experience in their suggestions for disciplining children in the kindergarten. And most four- and five-year-olds are rather self-righteous; "I never do that" is commonly heard. The teacher may therefore have to point out that banishing the offending child forever from the kindergarten is too severe a punishment for tearing a book. She will need to suggest other possibilities until the children arrive at some better judgment. From a learning standpoint, it is much better for children to make these decisions than for the teacher to make them. Children need much help

in making decisions; learning to live peacefully and happily with others is a slow and difficult process. Allowing children to make their own decisions will not solve all behavioral problems—probably not even most of them—but it will place an increasing responsibility on children for their own behavior.

Children soon recognize that there are “outside voices” for shouting on the playground and “inside voices” for talking and discussing in the classroom. They can learn to regulate their own behavior in this respect and help to formulate almost all the rules necessary for satisfying living in the kindergarten. It may be a good idea for the teacher to list these standards of behavior and post them where children can see them. Even though no one but the teacher is able to read them, merely having them where they can be seen will serve as a reminder to children.

In the making of group decisions, all points of view should of course be heard. Discussion should be carried out in such a way that everyone can make suggestions for evaluation by the rest of the group. Children should learn that each individual has rights and responsibilities which must be respected, and no one should be subjected to undue pressure by others.

Most modern educators would agree that children work best in groups in which self-imposed standards help them to reach the common goals for which they strive. In order to function effectively, laws or standards of behavior must be internalized, or made one's own, and one of the most effective ways of bringing about internalization is to permit the child to help shape the rules by which he lives. Many children in school “behave” only when the teacher is present, either because they do not want to disappoint her or because they fear her censure. If children are allowed to formulate their own standards of behavior, they will not need the teacher to tell them how they should behave; rather, they will remind one another and thus relieve the teacher of much onerous police duty.

The good kindergarten provides many group experiences for children, building on one of the strongest motivating forces in

juvenile society—gregariousness. Most children prefer being with their peers to being alone; the group provides the setting in which the child expresses his ego and experiences the joys of social interchange. The good school is also concerned with the quality as well as quantity of the child's group experiences.

Teachers who understand children know that four- and five-year-olds will not always be successful in these first group contacts. They need repeated opportunities to develop sensitivity to the rights and privileges of members of a social group and guidance in becoming responsible group members. Because the kindergarten teacher is free of the pressure to teach children to read, to write, to compute, or to perform in some other closely defined manner, she can devote a great deal of attention to helping the child develop satisfactory social patterns in living with his age mates.

Often the teacher must be satisfied with what appears to be infinitesimal progress in this area. A child who has experienced failure in his behavior in the group should have the opportunity to experience success as early as possible after the failure. It may be necessary to isolate such a child from the group for a time, but as soon as he appears to be able to work or play pleasantly with the others he should rejoin them. Children learn by doing, and they cannot learn how to behave in a group by being isolated. The child learns to be a responsible group member by participating in a variety of activities with others, not by standing in the hall or sitting on a chair removed from everyone.

Unless the safety of other children is involved, the offending child should be removed from the group only long enough to reorient himself. If he cannot play constructively with equipment used by the group he may have to be forbidden to use it—again, a decision which children can make. But as soon as he is able to play with it properly he should be permitted to use it again. This means that some children may need special guidance. The kindergarten teacher may have to help some children to overcome handicaps in social relationships which they have developed prior to

school entrance. A child who has been the focus of attention at home may find it difficult to subordinate his selfish desires to the desires of the group; he may be unable to take turns in using equipment or in group discussion. A child who has had few social contacts may let the rest of the group take advantage of him, and the teacher may have to teach him how to assert his own rights. There will be children, even at four or five years of age, who have been taught at home to fight for their "rights" and do so in the kindergarten. These children also need special guidance from the teacher so that they can learn to live more satisfactorily in the group.

It must be emphasized that the achievement of self-discipline and self-direction is exceedingly complex and difficult. In helping children to develop these qualities the teacher in no way relinquishes her role as leader. She still controls the social climate in the kindergarten and it is she who sets the frame of reference within which children make choices. However, in group self-discipline, responsibility is shared with the children, and as a result authoritarian control becomes quite unnecessary. Even the kindergarten child can, with skillful guidance, be made aware of the patterns of group interaction and as a result develop some degree of self-discipline. He will learn very early that if he does not respect the rights of others in taking turns, his rights will not be respected. He can learn very soon after he becomes a part of the group that each member must give up some of his own selfish desires in order to receive the benefits of group membership.

The development of independence is certainly one of the most important aims of group living. Many teachers, like many young parents, find it difficult to allow children to perform for themselves all the tasks which they are capable of performing. Sometimes parents are quite amazed at how independent and responsible their children have become after only brief experience in school. The kindergarten teacher who knows how these qualities develop in children sets the stage for their growth.

Making materials and equipment readily accessible to chil-

dren will help free them from the necessity of calling on the teacher and therefore will help them develop more responsibility and self-dependence. Subtle suggestions on the part of the teacher may also help build initiative, resourcefulness, and independence. When a child encounters difficulty in the pursuit of an activity, such a question as "Do you see anything else you can do?" may help him to get on the right track in the solution of his problem. Reminding children of past experiences which have a bearing on a present difficulty and helping them see relationships and understand the causes of failure will help them to become less dependent on adults.

Children learn to accept responsibility by assuming responsibility for many little jobs in the kindergarten—feeding the fish, watering the plants, or cleaning up after work time. Participating in such duties helps to build in the child a feeling of personal obligation for the welfare of the group.

Life in the well-planned kindergarten, then, is so organized that young children learn to get along with one another, become willing to accept the suggestions of others, and develop self-respect. The democracy in which our children live makes demands on these skills. There is perhaps no area of learning in which adults are so immature as that of human relationships. Therefore these learnings cannot begin too early; in the school they begin with the very youngest.

The concept of democracy has far-reaching consequences in guiding the growth of children. One of the first essentials is a considerate regard for the characteristics of the individual child. A sensitivity to the unique nature of each child and respect for his personality are the very essence of democracy. The good modern school has the responsibility of studying and developing the interests and abilities of every child. In her concern for helping children to become effective group members, the teacher must not lose sight of her obligation to draw out the unique potential of the individual child.

One of the most important elements in a democracy, as we

have said, is leadership. We have long since ceased to think that leaders are born. Every child has potentialities for some kind of leadership, and each child should have the opportunity to experience the satisfactions of being a leader.

We have also said that freedom is necessary to a democratic society and children must be taught to use it wisely. They have to learn—and often the understanding comes slowly—what freedom means and what it entails for those who would have it and keep it. Such learning has its beginnings in simplest form as soon as the child is capable of making a choice and assuming responsibility for the outcome of his choice. By the age of four the child is ready for some education in freedom.

Freedom to make choices implies a freedom to choose goals. If the child is helped to choose wisely, to set his course and work persistently until he has achieved his goal, he has learned a lesson that will be valuable throughout life. Children can quite effectively direct and control their own behavior when they are engaged in an activity that appears to them to be worthwhile, when they are pursuing goals that are within their understanding, and when they have a chance to exercise some judgment. Adults recognize this need for the individual to participate in the group by setting up committees within their various organizations. Everyone, even a child, will more readily support an activity if he has had a hand in planning it from the beginning. The group becomes more cohesive and more effective in achieving its goals if everyone is given a part.

Problems for Discussion

1. Are there matters in the kindergarten about which children are too immature to make a decision? Give some examples.
2. Mrs. Owen says to her kindergartners, "I want you to. . . ." Mrs. Sachs uses this approach in talking to children: "Let's . . ." or "It's time to. . . ." Which do you think is most effective with children? Why?

3. Are most classrooms in your experience democratic or autocratic in nature? What characteristics of the teacher differentiate one situation from the other?
4. Miss Farnsworth tells children not to worry about when it is time for recess or time to clean up. "I'll tell you when it's time," she says. She is disturbed because her children seem immature and dependent. How could Miss Farnsworth improve this situation? What might be a cause of immature behavior in these children?

Suggested Additional Reading

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14. Experiences in Science

Science for the kindergarten child is a part of ordinary, everyday living. Many of the questions of the four- or five-year-old begin with "why." The child wonders why it rains, why things cast shadows, why the sky doesn't fall down, why the grass is green. He seeks explanation for all manner of phenomena that every day challenge his curiosity. It is this natural curiosity of the child which provides the foundation for science experiences in the kindergarten. Science for the kindergartner, then, is experiences with materials which help to explain "why." More accurately, it is a *series* of experiences which begins when the child is very young and continues throughout his life. In a well-integrated curriculum, the child has experiences in science, as in other areas, as soon as he is old enough to seek knowledge. These experiences should gradually broaden and deepen to meet his expanding needs and interests.

The child's environment is full of things that raise questions "answerable" only in terms of science. Watch a four- or five-year-old as he goes through his day. His mother wakes him. How did her voice travel to him? How does his ear "catch" the sound? How does he know the meaning of the sound—how does his brain work so that he can interpret it? He gets up and dresses. Of what

is his suit made, his shoes, his stockings? He eats his breakfast. What is cereal? How does it grow? Where do eggs come from? Where does milk come from? The sun is shining into the breakfast nook. Where was the sun while he slept? Why does it start shining in the morning? Why does the moon shine at night—and why is it big sometimes and at other times only a sliver? Daddy backs the car out of the garage to take him to school. What is a gasoline motor? How does it work? How does the gasoline make it go? When the child arrives at school he hears a bell. What makes it ring? How does the bell work? As he enters the kindergarten the teacher asks him to turn on the lights. What is electricity? How does it travel to the lights? Why do lights get hot? In a corner of the classroom is a white rabbit eating carrots. Why do rabbits eat carrots? How are they like other animals? How are they different?

Thus, in a space of just a few hours, the modern child is confronted with a vast number of science phenomena in his environment—and he is curious about all of them. The science program of the kindergarten can help to provide at least some answers by helping young children to explore their world constructively.

How Children Learn in Science

The science program can do more than provide answers. It can help children to develop facility in what has been called—erroneously, since it applies as well to every area of learning—the “scientific” method. This consists of (1) recognizing a problem, (2) formulating some possible solutions or working hypotheses, (3) trying out the suggested solutions, and (4) arriving at a conclusion which can apply as well to other, similar situations. If the problem is not solved, new hypotheses must be formulated and tested. This problem-solving approach can be used by the young child as well as by the research scientist. As

Burr, Harding, and Jacobs¹ point out, "Research work really begins in the kindergarten. When five-year-olds ask questions the answers to which involve group exploration and investigation at their level of development, research has begun."

Even the four- or five-year-old can use the problem-solving approach with problems that are within his understanding. The teacher can help children to form hypotheses by using as a point of departure the questions children ask or various everyday happenings in the kindergarten. A child notices, for example, that when he arrives at school on a wintry morning, the plants on the window sill do not look as they did the day before. The plant on the teacher's desk, however, is still as it was when he left the preceding afternoon. "What has happened?" he asks—thus stating the problem.

Here is a golden opportunity for effective science learning. In their discussion the children recall that it had been very cold during the night. They then formulate a hypothesis: perhaps it was too cold and the plants on the sill froze and died. It was not so cold in the middle of the room so the plant on the desk did not freeze.

Is this the end, is the discussion complete? Not if we wish to teach children how to solve problems. The next step is to try out the hypothesis, to see what happens to plants when they are left out in the cold. So the children leave one plant outside overnight with nothing to protect it. They put another one outside covered with a box or leave it some place where it has partial protection. The next morning they find the answer to their problem. One plant has frozen; the other is still green and fresh. The hypothesis was apparently correct. Through further discussion, the children then formulate their conclusion: if plants are not protected from the cold, they will die. Note that their conclusion is a generalization, a concept—not just a diagnosis of why a par-

¹ James Burr, Lowry Harding, and Leland Jacobs, *Student Teaching in the Elementary School*, New York, Appleton-Century-Crofts, 1950, p. 277.

ticular plant died. They can apply the concept they have formed to other, more complex problems in the future.

But suppose that the experiment described above was unsuccessful. Suppose that both plants froze—or that neither did! Then the group discusses what happened, formulates another working hypothesis, and proceeds to test until a solution is found for the problem they set out to solve. In this simple experiment they have all the elements of "research." They have a problem: one plant did not die, the others did. They formulated a working hypothesis: the plants on the window sill died because it was colder there than in the middle of the room. They tested their hypothesis by experimentation and came to a conclusion.

These four steps have certain implications for learning. We have said that the first step is to "recognize a problem." But what constitutes a problem? In terms of the science program, we can say that a problem exists as a problem when something occurs which the observer, *on the basis of the concepts which he has previously held*, could not have predicted. The implication here is that there are always at least some previous concepts, even among kindergartners; otherwise every aspect of life would be perceived as a problem. Previous concepts always play a role in the formulation of hypotheses. The kindergartner must have at least some conception of the function of cold in order to be able to suggest a working theory; otherwise the experiment becomes trial-and-error. If the experiment proves his hypothesis correct, the child has another concept to add to his store—and to apply to further situations. What we are saying, in effect, is that learning is cumulative; that problem-solving leads to the identification of further problems, on increasingly higher levels; that learning does not take place in a vacuum; and that learning in any area involves drawing upon the total store of knowledge, cutting across several so-called "subject-matter" boundaries. Learning involves the integration of new concepts with what is previously known.

The other implication is that testing hypotheses, or trying

things out, is a natural and fundamental way of learning, at the kindergarten or any other level of development. Science becomes meaningful to children who perform experiments. For the kindergarten child, science is a "doing" rather than a "talking about" experience. Because the young child learns more effectively through direct experience, the wise teacher will help children use all their senses—sight, hearing, smell, taste, and touch—in seeking answers to their questions. Children need to do more than just observe in order to learn; they need to get into the middle of things when action is taking place. Do plants need water? Two plants, one watered, one left dry, will give the answer. Do magnets pick up glass? Can they pick up things through paper, water, and glass? An experiment with all manner of small objects will provide the solution. Do plants need sun? Put one in the dark and one in a sunny place and see what happens. Does water have pressure? Attach a hose to the faucet, vary the pressure, and see if the water is able to "push" anything. Does it push small and big things equally well? Will water push if the faucet is turned on only slightly? Why not? Try it.

For the kindergartner, this approach may mean little more than reducing the problem to such simple form that observation will yield the solution, or trying something to see what will happen. The scientist, on the other hand, may use the method merely to confirm a hypothesis, or prediction, based on his previous knowledge. The experimental approach teaches the child to depend on himself in finding answers.

The Content of the Science Program

For a long time observation of living things was the prime activity in science for young children. Science experiences were limited largely to the plant and animal world, and even then they were concerned mostly with mere identification. But today we believe that it is relatively unimportant for the young child to know that it was a geranium that froze and a fern that didn't;

it is more important for him to learn something about the reaction of plants to temperature—in other words, to form a concept.

Today we know more about children and how they learn; we realize that the scope of their interests is much wider than the biological sciences. Children are concerned with a myriad of things—magnets, heat, light, stars, the planets—all manner of things that they see, hear, or otherwise experience. The questions and problems that arise in connection with everyday living, projects initiated by the children themselves, contributions they make in the matter of collections—all are excellent springboards for learnings in the science area. For science study goes on wherever children are, and good teaching means using first-hand experiences and actual contact with materials and processes in the physical environment all about us.

Four- or five-year-olds are interested in turtles, guppies, goldfish, polliwogs, rabbits, chickens, and all of the other small animals. Children of this age also enjoy caring for plants and flowers, and in the spring they often begin to show interest in gardening. Many educators feel that every kindergarten should have some living plants and animals in it so that children can observe them and study changes. Certainly children need a variety of experiences with living things. However, the teacher should remember that children are the most important occupants of the room. If at any time the presence of animals or plants makes the room less attractive or comfortable, it is better to do without them or to choose a kind that can be cared for easily.

The kindergarten-age child also likes to collect things and derives great pleasure from arranging and rearranging the objects in a collection. At this age he feels no need for labeling the materials; merely manipulating them gives him sufficient satisfaction. At a later age he will want to "classify," or to collect for some purpose, but at four or five just collecting for collecting's sake is sufficient.

Exploration of the possibilities of the physical sciences as part of the science experiences for young children has only just begun. During these times, when even the youngest child is science-conscious, the kindergarten should utilize children's interest to help them gain some understandings of chemistry and physics. Even kindergartners can learn, by mixing vinegar and soda solutions, what happens when an acid comes in contact with an alkali. This experiment not only teaches children the properties of these two substances but may be of real practical significance, at least to future cooks in the group, for it will enable them to alter a recipe for sour milk when only sweet milk is to be had. This introduction of the practical applications of science also reflects a change in the science teaching in the kindergarten from the taxonomic approach described earlier.

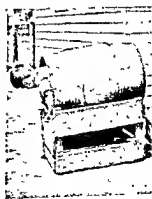
How the Science Program Contributes to Growth

Today, when a thinking citizenry is more important than it has ever been, educators realize that science teaching is a valuable means of developing the habit of critical thinking and the techniques of exploration. Planned, practical scientific education, beginning in the kindergarten, will help to provide children with the techniques and attitudes needed by the world in which they live. Science helps children to understand their world. Even more important, it is a tool that enables children to learn to observe in such a way that they can draw conclusions.

Experiences in science should help also to build respect for the opinion of others, for science demands an open mind and requires that statements or criticisms be backed up by demonstrable proof from unbiased data. Science activities also provide an excellent opportunity for children to work in groups, to cooperate with one another in searching for solutions, and to pool information. Science experiments offer good opportunities for social growth, growth in respect for others as well as for the authority of facts and unbiased information.



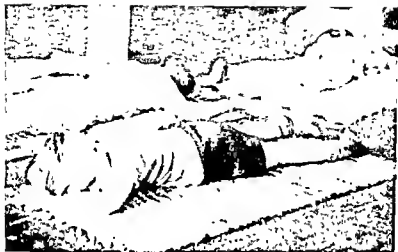
Children's growing bodies need much vigorous exercise in the open air. Most kindergarten playgrounds include such muscle-building equipment as slides, jungle gyms, and bars. But children also need other kinds of play, and they can also have fun without elaborate apparatus. The children shown below are playing a circle game which requires no special equipment. The boy shown below has discovered that an empty barrel makes a fine setting for dramatic play, alone or with others.





When they first enter kindergarten, most young children, like those in the picture at upper left, are capable of only "parallel" play—playing beside but not with one another. The children in the picture at upper right are at the stage of "associative" play. They have discovered that it is more fun to play or work with others than alone—but their "group" still consists of only two children. Toward the end of the kindergarten year, some children are capable of playing co-operatively in groups of three or four, like the children in the picture below.





Proper nutrition and adequate rest are essential to the health of the young child. The school, of course, cannot supply all the needs of children in these areas, but it can provide a lunch or mid-session snack to supplement their diet, and it can see that every period of strenuous activity is balanced by a period in which children are quiet and relaxed. Daily observation by the teacher and periodic inspection by the school nurse or doctor are also important aspects of the health program in the kindergarten. In addition to safeguarding his health, such a routine teaches the child that doctors and nurses are there to help him.





Picture by Tony Naumannlah,
of the Fresno (Calif.) Bee

A trip to the nearest traffic crossing, a visit from the local policeman, a talk by a member of the safety patrol, or informal discussion, guided by the teacher, can result in many valuable safety learnings. The children in the picture above, participants in a school traffic-training program, are putting what they have learned into practice through dramatic play with their wheel toys. The picture below is another example of follow-up activity after a program to teach children the rules of safety. The children, of course, cannot read the words printed under the picture that they have drawn, but they know their meaning.



Stop look and listen

The red lights are on



The pictures above show some of the remedial activities that can be conducted for deaf children of kindergarten age. The child at the left is learning to form the "p" sound by blowing out a feather. Those at the right are learning to identify sounds, with the aid of special equipment. The child shown below is in a special school for mentally retarded children which encourages mothers to participate.



*Picture by Joliz Lombardt
of the Fresno (C&M) Bee*



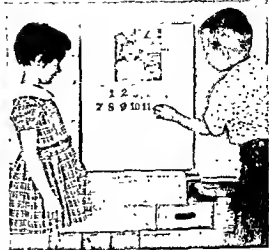
Through their science activities, kindergarteners learn the rudimentary principles of growth—and many other things in the process. The teacher in the picture above is outlining the “plan” children will follow in planting seeds “to see if they will grow.” As a result of this activity, the children will learn a valuable technique of “finding things out” which can carry over to other activities. The child in the picture at the right is demonstrating her understanding of the principle that plants need water, and also her developing ability to assume and carry out responsibility. Science activities in the kindergarten are no longer limited to experiences with plants and animals. Children are also introduced to such tools and concepts of science as the magnet.





The alert kindergarten teacher uses every opportunity to teach children concepts of number. In the picture at the left, the children are performing a finger play to the delight of their visitor, a prospective member of next year's class. The child in the picture at the right is learning to count in another way; by using a "number board." The children in the picture below are learning the meaning of "pint," "quart," "half" "quarter," and many other measurement concepts by pouring water from one container to another.





The homemade (by the teacher) clock in the picture at the left is helping children to learn the number sequences and to develop some ideas about time. The calendar shown at the right, also homemade, is another effective learning device. Children insert a numeral every day.

Parents can and should be part of the school too. In the picture below, mothers are apparently enjoying the opportunity visiting day gives them to see what and how their children are learning.



For the young child, in fact, science and social studies blend in rich and meaningful experiences that contribute greatly to the child's growth. It is impossible to classify one set of experiences as belonging to the social-studies area and another to the area of the sciences. In fact, every science experience in the kindergarten involves aspects of growth in many other fields. The follow-up experiences of a train trip, for example, involve a combination of science, social studies, language, number, and creative activity of all description. Most kindergartners will want to draw or paint trains after such a trip. Some few mature children may even wish to make a picture book of the trip with pictures contributed by the children and "stories" dictated by them to the teacher. They may wish to hear a story or sing a song about trains.

Such a trip would probably stimulate much curiosity about engines, be the one which pulled "their" train steam or diesel. A simple experiment can show children that steam has force. Heat some water in a test tube which has a cork placed lightly in the end. When the water in the test tube boils, the steam will push the stopper out. Perhaps the diesel engine would be too complicated for kindergartners to understand but they can develop understandings about energy through experimentation. A simple toy steam engine will help children to see that steam energy can be harnessed to turn wheels.

Having experienced a train, children often return to the kindergarten eager to build their own train. Fortunate is the group of children with a teacher who can help them carry out their ideas. This activity not only teaches building skills but fosters the social skills involved in group endeavor. After the train is completed, much dramatic play will center around various train activities. Children will take turns being the engineer or passengers—and this will involve another social learning. Arithmetic learnings enter in when passengers need to buy tickets. Thus an activity may cut across all the subject-matter

lines. It is neither possible nor desirable to classify an experience such as this as "science," "social studies," or "art."

In a well-planned science program, children find answers largely through their own investigation. Use of this problem-solving approach makes them more self-reliant and self-confident. The science program also helps to remove or minimize many childhood fears. A child may be afraid of thunder and lightning because he doesn't understand them; but if he knows something about their cause and how best to protect himself from possible harm, his fear will abate or be replaced by prudence. Jersild and Holmes² have shown rather clearly that young children do not fear things that they understand or can control to some extent. If science activities had no other aim than to help children overcome fears, their place in the kindergarten would be amply justified.

The Science Curriculum

While much of the science teaching in kindergarten is initiated in response to the spontaneous interests of children, the science program should not be based exclusively on such incidental learnings. If it is, science experiences will be random and much valuable material will be omitted. The interests of four- and five-year-old children are rather limited, and certainly part of the role of education is to widen children's horizons and introduce them to new experiences.

It is difficult to enumerate specific learnings for kindergarten children in any area, but, because it is not one of the so-called "skill" subjects, less attention has been given to the expected competencies in science than, for example, in reading or arithmetic. There is yet no uniformity in science experiences for any grade, much less kindergarten. However, the National Society for

² Arthur T. Jersild and F. B. Holmes, *Children's Fears*, Child Development Monographs, No. 20, New York, Teachers College, Columbia University, 1935.

the Study of Education² specifies the following as areas in which there should be planned experiences at every grade level, including kindergarten:

1. *The Universe*—The stars, moon, sun, planets, causes of day and night and seasonal changes, tides, eclipses, other galactic systems beyond our own.
2. *The Earth*—Origin of the earth, formation of mountains, erosion, volcanoes, prehistoric life, forces which have changed and are changing the earth.
3. *Conditions Necessary to Life*—What living things need for existence, how they are affected by changes in their environment, how they survive.
4. *Living Things*—Kinds of plants and animals, group life, how they adapt themselves for protection, life cycles, how they obtain food, their economic importance, and how man influences nature.
5. *Physical and Chemical Phenomena*—Light, sound, gravity, magnetism, and electricity; changes in matter; phenomena associated with atmospheric changes and radiant energy.
6. *Man's Attempt to Control His Environment*—Gardens, farms, orchards; discoveries and inventions; how man controls living things; study of places man cannot reach directly and other related topics.

Needless to say, the experiences in each category that are suitable for the kindergartner are far different from those that are suitable for the sixth-grader. The young child, because of his limited understanding, may study the universe merely by observing shadows and sunbeams, the changing of the seasons, the moon, or some of the simpler constellations. The kindergarten child may be unable to understand much about the sun other than that it is hot, it is big, it is far away, and it helps living

² *Science Education in American Schools, Forty-sixth Yearbook*, Chicago, National Society for the Study of Education, University of Chicago, 1947, I, 75, 78.

things to grow. The upper-grade child would be concerned with much more complex matters, such as why the sun is hot or how it helps living things to grow. In science as in other areas, new learnings always build on previous experience or learnings. An important foundation for future learnings can be laid in the kindergarten.

For the kindergartner, applications of scientific knowledge should be immediate and purposeful. The test of a good science experience for children of this age is not their ability to describe it after it is over but rather their ability to use what they have learned in some related situation. A simple experiment to answer the question "Do plants need water?" involving the comparison of an adequately watered plant with one left unwatered will answer the specific question, but it will also give the participants knowledge that applies to many other living things in their environment. After such an experience it may be easier for the child to remember to keep his puppy's water dish filled, or to understand the need for rain during the crop-growing season. Small matter that the child is unable to verbalize about the experiment if he can apply what he has learned. The alert teacher will therefore provide an early opportunity for applying new learnings. The "test" of the kindergartner's learnings after the experiment described above might be his willingness to assume and ability to carry out the responsibility of supplying water to plants and animals in the kindergarten or of tending a patch in the school garden.

The teacher who understands child nature uses every means at her command to help children clarify their understanding. She exploits children's spontaneous curiosity, but she goes beyond and expands their existing interests. She plans with children for their experiences. She uses audio-visual aids of all kinds, field trips and excursions, experiments and discussions. She helps even four- and five-year-olds keep some record of what they have experienced if they express a desire to do so. The intelligent

teacher seizes every opportunity to develop children's conceptions of time and space, of quantity, and of cause and effect, by widening their contacts with things and forces in their environment.

This means that even the kindergarten teacher needs to have some background in science. It doesn't mean that she must know all the answers; there are things that teacher and children can find out together. But she must know where to find the answers and how to interpret them to young children. Fortunately, most children are very much interested in scientific things, and the science of the kindergarten is simple; the teacher with a relatively meager science background can do an effective job of teaching in this area if she uses sound sources. *Elementary School Science and How to Teach It*, by Blough and Huggett, is a very helpful source for the teacher untrained in science. The authors offer the following suggestions: *

1. Read science materials on both your level and the children's. Keep a good science book on your desk as a handy reference.
2. Do some of the experiments suggested for your age group to get the "feel" of them.
3. Seek help with difficult problems from science teachers if they are available.
4. Use the state, county, or city course of study in science if there is one.
5. Do some of the things suggested in science books, such as observing, collecting, or visiting.
6. Use any manuals which accompany textbooks you are using.
7. Watch current periodicals for articles about science.
8. Observe other teachers working with children and science.

* Glenn O. Blough and Albert J. Huggett, New York, Dryden, 1951, p. 5.

9. Avail yourself of workshops in science projects or extension courses which will help you teach science more effectively.
10. Be open minded in your approach to science teaching.

Science Equipment

Because the science program in the kindergarten is essentially an outgrowth of everyday living, relatively little specialized equipment is required. There are, however, some readily available and inexpensive materials which can help to make teaching more effective: ⁴

GLASSWARE—pint and quart bottles, shallow dishes, test tubes, aquariums, glass tumblers.

TOOLS AND HARDWARE—hammers, small saws, screw drivers, pliers, knife, can opener, brace and bit, file, assorted nails and screws, wire staples, wire screening, steel wool.

ELECTRICAL SUPPLIES—dry cell batteries, flashlight, bulbs and batteries, hot plate.

HOUSEHOLD CHEMICALS—household ammonia,⁵ vinegar, baking soda, sugar, peroxide, salt.

SCIENTIFIC SUPPLIES—scale, barometer, thermometer.

STATIONERY SUPPLIES—gummed labels, India ink, filing cards, ruler, yardstick, chalk, paper clips, colored paper, thumb tacks, blotters, rubber bands.

MISCELLANEOUS—wooden spools, assorted boxes for storing supplies, tin cans with tops cleanly removed, scrap wood, sand, pebbles, sawdust, mirror, rubber gloves, rubber balloons, strainers, sponge.

A packaged assortment of simple equipment for performing experiments with young children is available from Science Kit.⁶ Various departments of the federal government publish bulletins which are excellent sources for the teacher. A list of these publi-

⁴ Adapted from Herbert S. Zim, *This Is Science*, Bulletin, Washington, D. C., Association for Childhood Education International, 1945, pp. 36-37.

⁵ Use with caution.

⁶ 204 Deater Street, Tonawanda, New York.

cations can be obtained by writing to the Superintendent of Documents.* Teachers may also get information on request from such government agencies as the Department of Agriculture, the Forest Service, the Fish and Wildlife Service, the Weather Bureau, and the National Bureau of Standards.

Problems for Discussion

1. Miss Tate says that she believes in teaching science incidentally by waiting for children to show an interest in something before teaching it. Mrs. Gordon believes that a good science program requires planning. With whom do you agree? Why?
2. How would you plan a science lesson around a child's question, "What is rain?" What materials would you use to help children understand this phenomenon?
3. How would you set up a science experience to dispel fear of shadows among a group of five-year-olds?
4. Show how you would help children in the kindergarten use the problem-solving method (a) in regulating their own behavior in the classroom and (b) in caring for the books in their library corner.
5. What are the educational values of caring for plants or planting a school garden for young children?
6. Assume that it is winter and that your four-year-olds are speculating on where snow goes in the spring. How would you proceed to help them find out, using the problem-solving method?
7. Why is a science program which demands problem-solving of children a better program than one which has children merely identify plants and animals?
8. Write a lesson for an experience with magnets for a group of five-year-olds. What would be the objectives of such a science activity? How could you evaluate the learning? How would you determine whether you had accomplished the objectives you set up?
9. Mrs. Fenton, who teaches kindergarten in a rather isolated rural area, has asked you for some help in planning her science program. Would her program differ in any respects from yours, in a city

* Government Printing Office, Washington 25, D. C.

kindergarten? Why? What suggestions would you offer Mrs. Fenton?

Suggested Additional Reading

- Blough, Glenn O., and Campbell, Marjorie H., *Making and Using Classroom Science Materials in the Elementary School*. New York, The Dryden Press, Inc., 1954.
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- Science Education in American Schools*. Forty-sixth Yearbook, Part I, Chicago, National Society for the Study of Education, University of Chicago Press, 1947.
- Science for Children and Teachers*. Washington, D. C., Association for Childhood Education International, 1953.
- Yates, R., *Science with Simple Things*. New York, Appleton-Century-Crofts, Inc., 1940.
- Zim, Herbert S. *This Is Science*. Bulletin, Washington, D. C., Association for Childhood Education International, 1945.

15. Developing Quantitative Concepts

A rich kindergarten environment provides, in addition to a variety of other experiences, many opportunities for developing concepts of quantitative relationships. Interest in number and its functions is great among young children. It would be quite impossible, in fact, to keep numbers out of the kindergarten should one wish to do so. Even the four- or five-year-old needs some arithmetical concepts in order to carry on his small affairs. He counts chairs; he describes things as round or square or bigger or smaller; he deals with pounds and quarts and pints, with dozens and hundreds, with nickels and pennies. There is, even at this age, an emerging knowledge of fractions. The child asks to have something cut in "half" or that he be given "part" of something. In their play, young children are constantly dealing with number.

However, many of the ideas of young children about number are indefinite or inaccurate. The child speaks of "a lot," "a few," "more," "larger," "smaller." To the very young child, more than two is "many." Even four- and five-year-olds become easily confused in their quantitative thinking and thus err in making judgments. For example, if a child is given a choice between four one-inch pieces of candy and one six-inch piece, he often chooses the smaller pieces. Even though they add up to less than the six-inch piece, they appear to him to be more because there are

four pieces rather than one. Similarly, the child at this age may prefer a nickel to a dime because the former is bigger. Or he may, after asking his mother to cut an apple in half, request the "biggest half." All these are indications that, although the child may appear to understand quantitative relationships, his ideas are quite vague.

Number Objectives

In the course of exploring a well-planned kindergarten environment, the child daily experiences some aspect of number, and the skillful teacher helps him to assimilate these experiences into a meaningful background of understanding. The ability to handle quantitative concepts is an essential tool for living and working in our society, probably second in importance only to the ability to read and write. The kindergarten teacher does not offer formal lessons in arithmetic, but she is constantly watching for the teachable moment which occurs in all activities, when she can clarify number concepts. She is constantly helping children to notice differences in size, quantity, and distance and encouraging them to use the tools of measurement and to count. Quantitative concepts and the skills in using them inevitably grow out of experiences.

Systematic number teaching should start as soon as the child wants to express ideas quantitatively. This does not mean that a specific time should be set aside in the kindergarten day for formally teaching number; it means, rather, that the teacher should have in mind certain skills and understandings that she wishes to teach and that she should plan instructional activities around these skills and understandings. Number learnings should come about incidentally, but not accidentally.

It is difficult if not impossible to set up standards for achievement in arithmetic in the kindergarten. Some children enter the kindergarten with a greater understanding of number than other

children have at the end of the kindergarten year. The problem of readiness exists here as in all other areas. The kindergarten teacher needs to be aware of the many factors which influence the child's ability to understand numbers, among them his mental age and his maturity in abstract thinking, his general range of information, his background of experiences with number before school entrance, his vision, his hearing, and his general emotional and social development.

Just as children, at a certain level of maturity, develop and indicate a readiness to read, so also do they come to show an interest in learning the concepts of number, size, quantity, and related ideas. The child who shows no interest in counting, whose vocabulary does not yet contain such words as "half," "whole," "larger than," "smaller than," and "more than," or who does not yet know the names of many numbers is not ready to work with number concepts. There may be some four-year-olds, and possibly even some five-year-olds, who are at this stage of development. However, most kindergarten children show an eager awareness of number. Teachers who understand children are careful not to rush them into a learning experience for which they are not yet ready. A child who is not sufficiently mature to count should not be called on to display his lack of ability in numbers before the group. The child who is ready, however, should be helped to learn about number to the limit of his capacity and interest.

Assuming that there will be wide variation in achievement in any group of children, Rosenquist suggests the following objectives in arithmetic for kindergartners:²

1. To count to six by rote,
2. To enumerate groups of six objects,
3. To recognize groups of two or three simple objects without counting,

² Lucy Lynde Rosenquist, *Young Children Learn to Use Arithmetic*, New York, Ginn, 1949, p. 33.

4. To use partial counting when apprehending small groups (six or less) of simple objects,
5. To use these skills and understandings in everyday activities.

Another important aspect of the program of number in the kindergarten is to help children develop an interest in and an appreciation of our number system. Teachers need to challenge children with increasingly difficult situations involving numerical concepts. The beginning number work with four- and five-year-olds should stress not abstractions but rather social experiences involving arithmetic and the language of number—for example, counting the number of children who are absent, weighing, measuring, noticing whether Tom is taller than Mary, and so on. Arithmetic learnings should spring from the child's actual experience with concrete material. With such a background the child can step more easily into experiences which depend on his ability to handle the abstractions of number.

Learning to Count

Counting is one of the first number activities in which the child engages. Most children have had some counting experiences before they enter the kindergarten, but many children, even five-year-olds, do not yet know the number sequences. Learning to repeat the names of numbers in their proper order—that is, rote counting: 1, 2, 3, 4, etc.—takes a great deal of practice. The ability to count by rote is, of course, no indication that the child understands the number system or that he can correctly identify the number of objects in a group or use numbers functionally in any other way. It is, however, the necessary beginning. Before the child can learn the intricate processes of arithmetic he must know the names of the numbers and their proper sequence.

Fortunately, most young children delight in counting; the teacher need only be alert to opportunities to teach them to do

so correctly. She need not provide much motivation; children of this age provide their own.

In teaching quantitative thinking as in every other area, the teacher must start with what the child already knows and guide him into more and more ways of dealing with quantitative situations. A good beginning for many children is the wealth of nursery rhymes that deal with number. Children love to repeat the well-known phrases "One, Two, Button My Shoe," and doing so can help them to learn the serial order of numbers, the uses of numbers, and many other arithmetical concepts. Accompanying the rhymes with music and action adds to the children's enjoyment.

Rhymes and finger plays are not only fun for children but can introduce them to the vocabulary of numbers as well as to other aspects of quantitative thinking. The following rhymes² have been selected on the basis of these criteria. The children will have excellent ideas for acting them out.

1. Here's a ball—
And here's a ball—
And a great big ball I see—
Shall we count them? Are you ready?
One, two, three.
2. My daddy is big, my daddy is strong,
And his steps—like this—are large and long;
My mother's a lady, so dainty and nice,
When daddy steps once, my mother steps twice,
I hold both their hands and skip and keep pace;
I play I'm a pony running a race.
3. Sometimes I am tall,
Sometimes I am small,
Sometimes I am very, very tall,
Sometimes I am very, very small,
Sometimes small, sometimes tall,
See how I am now.

² Contributed by the staff and students of the College of Education, University of Tennessee, and the Institute of Child Welfare, University of Minnesota.

4. Fee, fi, fo, fum--
Measure my arm,
Measure my nose,
Measure myself
Way down to my toes.
5. Ten chubby fingers,
Ten chubby toes,
Two shining eyes,
And one little nose,
Two listening ears,
One nodding head,
Shut sleeping eyes,
And go off to bed.
6. Here are two tall telephone poles,
Between them a wire is strung.
Two little birds are flying by.
They hopped on the wire and swung.
To and fro, to and fro,
They hopped on the wire and swung.
7. Old Dan has two eyes,
Old Dan has two ears,
Old Dan has one mouth with many, many teeth.
Old Dan has four feet,
Old Dan has four hoofs,
Old Dan has one tail with many, many hairs.
Old Dan can walk, walk, walk,
Old Dan can trot, trot, trot,
Old Dan can run, run, run many, many miles.
8. Five little rabbits under a log.
This one says, "Hark, I hear a dog."
This one says, "Ha, I see a man."
This one says, "Run, run while you can."
This one says, "Ho, I'm not afraid."
This one says, "Stop, keep in the shade."
The man passed by—"We're still alive,"
Said the funny little rabbits,
And they ran, all five.
9. Ten little soldiers standing in a row,
They all bow down to the captain so,

They march to the left, they march to the right,
They all stand straight quite ready to fight,
Along comes a man with a great big gun.
"Bang," you ought to see those soldiers run.

10. Five little mice on the pantry floor,
Seeking for bread-crumbs or something more;
Five little mice on the shelf up high,
Feasting so daintily on a pie—
But the big round eyes of the wise old cat
See what the five little mice are at.
Quickly she jumps—but the mice run away
And hide in their snug little holes all day.
11. Father and mother and children three
Living in a house we see
All as busy as bees
For they are the finger family.
Father plays the violin,
Mother plays the flute,
Little Bully plays the horn
Toot, toot, toot.
12. Tick, tock, tick, tock,
Merrily sings the clock.
It's time for work,
It's time for play,
So it sings throughout the day.
Tick, tock, tick, tock,
Merrily sings the clock.
13. [Thumb]
This little boy has a very round face.
[Index finger]
This little boy stands tall in his place.
[Middle finger]
This little boy is a giant so great.
[Ring finger]
This little boy has come in just too late.
[Little finger]
This little boy can stand up all alone
And he says to the first, "How fat you've grown."

14. [*Creep down over knee with index and middle fingers*]
'Tis all the way to toe town,
Beyond the knee-high hill
That baby has to travel down,
To see the soldiers drill.

[*Count toes*]

One, two, three, four, five in a row,
A captain and his men

[*Count again*]

And on the other side, you know,
Are six, seven, eight, nine, ten.

15. Five little squirrels sat in a tree.

Said the first little squirrel,

[*Left-hand thumb*]

"What do I see?"

Said the second little squirrel,

[*Index finger*]

"I see a gun."

Said the third little squirrel,

[*Middle finger*]

"Obl Let's run!"

Said the fourth little squirrel,

[*Ring finger*]

"Let's hide in the shadel"

Said the fifth little squirrel,

[*Little finger*]

"I'm not afraid!"

[*Clap hands*]

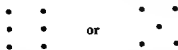
When bang! went the gun

And how those squirrels did run!

Beginning with nursery rhymes and finger plays, the child associates numbers with parts of the body. He counts his fingers, his toes, his eyes and ears. Then he associates number with other things in his environment—with the wheels on a car, the number of people in his family, the pennies he has for candy—and with stories in which number plays a part, such as "The Three Bears." In school he counts the number of napkins needed at juice time.

He counts the number of children who are required for a game or absent from school.

The child learns first to count units. Only later is he able to recognize a group of objects. Adults do not have to count such groups as



They can tell at a glance that the first group is composed of six units, the second of five. The older kindergarten child is just beginning to develop this ability to perceive groupings. After much experience in grouping objects, the child may become able to associate symbols with objects—to recognize that the number 3 stands for three objects. He may even be able at this stage to arrive at a realization that if three bears are added to three bears there will be six bears. However, it is only some time after he has passed kindergarten age that the child is capable of manipulating arithmetical symbols which are completely abstract.

Teachers can give children practice in counting and in recognizing groupings by asking for "five blocks" or "two chairs" or "three green crayons." By the end of the kindergarten year, many five-year-olds not only can recognize the numbers through ten but have developed sufficient skill to write some of them.

Various devices can be used to develop counting ability. Some kindergarten teachers encourage children to "compose" number stories with colored beads. The child strings, for example, three yellow beads, four red, six green, and two blue. Then he tells a story about them to the other children: "Once there were three bears and four wolves and six birds," etc. This helps the child learn not only to count but also to identify colors and to express himself to the group.

A number board, purchased or fashioned from plywood, can help children learn the concepts of "one-ness," "two-ness," and so on. The numbers are on one side of the board and opposite

each number are holes for pegs. By associating a specific number of pegs with the appropriate number symbol, the child learns the concept of quantity.

Learning the Ordinal Use of Numbers

In addition to learning to count, or to identify the number of objects in a group, children need to know something about the relative position of each number in the whole series of numbers. They need to know, in other words, both that 5 identifies the number of objects in a group and that it is one less than 6 and one more than 4.

These two ideas expressed by a number are called, respectively, the cardinal, or quantitative, meaning, and the ordinal, or serial, meaning of that number. The two meanings are vaguely differentiated in the child's thinking before he is able to express them in language. "Attaching number names to quantities helps him to distinguish one quantity from another, and the ideas become clearly defined as he discovers examples of them in his activities with quantities. For example, he sees that the fifth chair is next to the fourth chair, and that there is a group of five because there are five chairs in it."²

Understanding of the ordinal and cardinal meanings of numbers is essential to an understanding of the fundamental processes involved in arithmetic. The kindergarten teacher must, therefore, give the child a firm basis of understandings before sending him on to first grade.

Applying Quantitative Concepts

The kindergarten child is having many experiences with number and he is beginning to understand the significance of number in his life. He is beginning to see that being able to express quantitative ideas helps him to make himself understood.

² Rosenquist, *op. cit.*, p. 5.

In his kindergarten experience, the child develops concepts of "adding to," "taking away from," and comparing contents. In their play, children fill cups, pails, boxes, and jars with sand, water, or earth. They pour the contents from one container to another or take part of them away. They may empty a small pail of sand into a larger one and find that more sand needs to be added in order to fill the bigger pail. As the result of such experiences four- and five-year-olds begin to use—and more important, to understand—such relative terms as "much," "little," "more," "less," "heavier," "lighter," "part," and "add to."

The young child learns concepts of fractions by experiences in dividing things into parts. He cuts a ribbon in half so that a friend may have a piece; he cuts a piece of paper in two so that he can make two pictures instead of one; he breaks his candy into more or less equal pieces so that he can share it with three of his friends. He does not yet recognize the symbols $\frac{1}{2}$ or $\frac{1}{4}$, but he has incorporated the words to describe them into his vocabulary and he has at least some understanding of their meaning. The teacher encourages these activities, for she knows that they will help the child to acquire readiness for learning more complex quantitative concepts in first grade.

Learning Money Values

Kindergarten children often have very vague ideas concerning money values. Understandings here as elsewhere are dependent on experience. It may be that middle- or upper-class children, who have had more money to handle, develop understandings at an earlier age than children from the lower socioeconomic class. There is some evidence that judgments concerning the size of nickels, dimes, etc. are related to socioeconomic class, the lower-class child having a tendency to judge them as being larger than they actually are.⁴ The kindergarten extends children's

⁴ L. F. Carter and K. Schooler, "Value Need and Other Factors in Perception," *Psychological Review*, 1949, LVI, 200-07.

understanding by giving them as many experiences involving money as possible. The group may make a trip to the store to buy juice or crackers for lunch. Or the children may deposit money in the school bank or bring money to purchase something at the school store. All these occasions are opportunities for having important, meaningful experiences with our monetary system.

Learning Time and Space Relationships

The child's ideas of time and space relationships are developed through planned experiences in the kindergarten. The alert teacher calls attention to variation in sizes in the group—John is taller than Mary; Sue is bigger than James. Children use and manipulate objects of various sizes and shapes.

The kindergarten child is interested in the clock. He observes time relationships—after recess comes rest, when the big hand of the clock is on 12 and the small one on 10. Often he knows what "bedtime" looks like on the clock, or "getting-up time," or "school time." A few mature five-year-olds may even have a rudimentary knowledge of telling time. The teacher should capitalize on this interest of children by having available in the kindergarten a large, functioning clock and, if possible, at least one toy clock which children can manipulate themselves. An effective toy clock can be made from plywood, with inexpensive metal house numbers used to indicate the hours. Simple hands, cut from wood, should be attached with a nut, bolt, and lock washer so that they do not tighten when children manipulate them.

A toy clock such as this can be compared to the regular room clock. This teaches children to see likenesses and differences, an important skill in learning to read, and also familiarizes them with the sequence of numbers up to 12. The kindergarten teacher may set the clock for juice time, for example, telling the children that when the room clock gets to look like the toy one it is time for the scheduled activity.

A home-made clock jigsaw puzzle can also help to familiarize

children with clock symbols. They can consult the room clock for help in putting the puzzle together and thereby get added experience with the "design" of clocks.

Kindergartners are also greatly interested in the calendar. The four- or five-year-old may measure time by intervals between holidays or by the relationship of some event to his birthday. The teacher should take advantage of children's interest in time relationships by making available a wooden or cardboard calendar on which children can note the passage of days, weeks, and months and the approach of birthdays and holidays. Noting the date can become a daily activity.

A satisfactory calendar can be made of plywood, with the numbers 1 to 31 painted with enamel on cut-out plywood squares. Thin strips of wood tacked across the calendar face will hold the squares in place. A calendar such as this can be used for any month. Putting the proper date square in place becomes an important daily ritual for the children.

In these ways, the teacher builds on the kindergartner's natural interest in time, space, and number to give him a rich background of quantitative experiences. Increasing the child's fund of quantitative understandings is the chief business of the kindergarten in this area. The child who enters first grade with such a background is more likely to be able to handle the arithmetic concepts presented to him there, and less likely to develop the dislike of arithmetic which comes from a failure to understand it.

Problems for Discussion

1. In her kindergarten Miss Carter has a clock puzzle which she feels helps to increase the children's quantitative and numerical understandings. What specific learnings might result from experience with such a puzzle?
2. Question a four- or five-year-old to see if you can find out something about his quantitative understandings.

The latter source has prepared the table below to show the number of children with marked deviation of various types in 1947.

*Number of Exceptional Children of Each Type
per 1,000 Children*

<i>Types</i>	<i>Number per 1,000 children</i>
Mentally retarded and slow-learning	50
Crippled (including cardiacs)	2
Blind	½
Partially seeing	2
Deaf or deafened	1
Hard-of-hearing	40
Behavior problem (maladjusted)	20
Epileptic and convulsive disorders	20
Glandular deficient	140
Defective in speech	120
Lowered vitality	150

In addition to these handicapped children, the National Society estimates that some 2 per cent of the school population can be classified as mentally gifted. These children too may need some special treatment in school.

Although specific estimates of the number of exceptional children of school age vary widely, authorities agree that there are many children who require special adjustments in their educational environment. Such children, it should be remembered, may have all the problems and needs common to "unexceptional" children in addition to those associated with their particular atypical development. No less than other children, and perhaps more, the handicapped need affection, acceptance, and approval.

And like other children, exceptional children need a facilitating environment.

The teacher's responsibility to understand them and to provide for their individual needs is at least as great as her responsibility toward other children. There is perhaps no better indication of the teacher's sensitivity to the needs of individuals than the provisions she makes for handicapped or deviating children. Teachers who cannot readily accept deviant children do not belong in the profession. In any school group a few children will require some special consideration, even if they are not, strictly speaking, "handicapped." If a teacher is unable or unwilling to adapt to such a situation, she is not in a position to help the children or their parents.

There appears to be very little research or published material available on the exceptional child under the age of six. Yet perhaps no part of the entire educational system is better able to care for the needs of exceptional children than the kindergarten. Because there is no formal body of subject matter that four- or five-year-old children must cover, the teacher is free to arrange activities and to adapt the program to the individual needs of her pupils in a way not possible at any other level in the school. The nature of available equipment, the teacher's ingenuity, and her understanding of the problems of deviant children are usually the only factors which can limit the development of good educational experiences for these children. And the importance of recognizing the exceptional child and providing experiences which will minimize or help him to adjust to his deviation early in his school career can certainly not be debated.

Nursery-school and kindergarten experience, it has been found, is especially valuable and "particularly necessary for exceptional children who suffer marked sensory defects, who come from underprivileged homes, who suffer severe emotional tension or show marked tendencies toward social maladjustment."² Being in a kindergarten often means that the child meets sympathetic

² *Ibid.*, p. 337.

understanding and objectivity in dealing with his problems for the first time in his life. It also may mean that his difficulties will come under earlier study and observation. Children with problems, as we have said, need affection, protection, and security; they need to feel that they belong to the group. A well-planned kindergarten can provide for these needs so that by the time he enters first grade the child is much better adjusted to the group and more ready to profit from the learning situation.

Stinchfield-Hawk,⁴ in a study of visually handicapped children, found evidence that nursery-school training raised the intelligence quotient of the children. He concluded that the educational retardation of these children can be reduced by beginning their education during the preschool years. The Heiders⁵ found that nursery-school experience is even more beneficial to blind and deaf children than it is to normal children.

The School's Responsibility for Exceptional Children

The National Society for the Study of Education⁶ has made perhaps the clearest statement of the school's responsibility toward deviant children:

Programs and services which are essential to meet the needs of different types of exceptional children should, in general, make specific provisions for: early identification, or finding them; prevention, in so far as it is possible, of accidents, diseases, and unfortunate experiences which may cause disability or affect negatively the strong emotions; early and complete diagnosis to determine each child's capacities, limitations, and needs; education and training which will challenge each child's capacities and interests and at the same time be adapted to his maturation

⁴ S. Stinchfield-Hawk, "Speed Training for Visually Handicapped Children," *Outlook for the Blind*, 1944, XXXVIII, 39-41.

⁵ Fritz Heider and G. M. Heider, "Studies of Preschool Deaf Children," *Volta Review*, May 1943, XL, 157-69.

⁶ *Education of Handicapped Children, Forty-ninth Yearbook*, Chicago, National Society for the Study of Education, University of Chicago Press, 1950, II, 319.

level and to those factors which may retard or limit learning ability. Finally, all programs for exceptional children must provide for excellence in *nurture* in all areas of the child's physical health, mental growth, and social experience.

"Early Identification"

The kindergarten teacher plays an exceedingly important role in the identification of handicapped children. Today the significance of this aspect of her responsibility is widely recognized. *Many a difficulty which might otherwise develop into a serious and permanent disability may be cured or minimized if it is recognized when the child first enters school. With our present knowledge of child growth, we can detect many problems and begin remedial measures when the child is very young. Even if the child's disabilities are such that they cannot be removed, early identification of them, before the child develops social sensitivity and emotional reactions to his handicap, will help to prevent him from experiencing the feelings of frustration, inferiority, withdrawal, or other maladjustment usually associated with deviance.*

Few kindergarten teachers, of course, are qualified to diagnose children's emotional or physical handicaps. But if a teacher observes her group closely and jots down what she believes to be significant items of behavior she can be of great help to the school physician or nurse in spotting children who have problems. *If a child always seems to be pushing other children aside so that he can get closer to the picture book or toy, he may be having difficulty in learning to respect the rights of others—or he may have a visual defect. A child who always appears to be unresponsive may have a behavior problem—or he may have a hearing defect, or be retarded mentally. (Very often children who do not hear well are misjudged as being behavior problems or slow mentally. They may appear to disregard what the teacher is saying when they are actually unable to bear it.)*

Poor hearing is one of the most difficult disabilities to detect

because children very often develop compensations for it. Thus it may masquerade as many other things. And, of course, many children do *not* listen carefully. The teacher may have become so accustomed to the child's saying "What?" that she does not realize the possible significance of the repeated question.

If, after the teacher has made sure that the child is bearing adequately, he is still not responding, she may suspect that he is mentally retarded. Some children, of course, are genuinely apathetic or dependent, perhaps because they have been over-protected at home. But in others excessive dullness and inability to take a lively interest in activities in the kindergarten may indicate mental deficiency. Some children come from homes of generally low average mentality, where deviation from the normal is not so noticeable. When they become part of the kindergarten group the deviation becomes much more apparent. The teacher must observe the child closely, especially in situations which require original thinking, to determine whether he is mentally retarded. If she suspects that he is, she refers him to the proper specialist.

At the other extreme in mental ability are the gifted. According to the Forty-sixth Yearbook,¹ "The mentally gifted, the retarded, and the maladjusted constitute an equally involved and complicated problem." Until recently, the retarded and the maladjusted have fared somewhat better educationally than the mentally gifted. The gifted child often is so capable of solving his own problems that he receives little attention from the teacher unless his boredom drives him into becoming a behavior problem. He may manage himself so well in the kindergarten that the teacher tends to overlook his needs. Yet even without standardized tests of intelligence the gifted child can be identified by the observant teacher. He is the child who seems to possess more than the average ability to handle abstractions, to solve problems in a unique way, to bring new and interesting ideas into a dis-

¹ *Early Childhood Education, op. cit.*, p. 318.

cussion. He is the child who seems more able than most children to apply past experience in the solution of present problems. Generally gifted children excel in insights and understandings and make adjustments rather easily. They tend to have superior ability in expressing themselves.

Such children should be given every opportunity to develop these abilities. They should be given responsibilities and tasks which challenge their thinking and, above all, they should be given many opportunities to express their ideas and to try them out. This does not mean that the child who is above average in ability should be permitted to hully others or always to be the leader of the group; in the informal atmosphere of the kindergarten, groups are fluid and leadership changes. Some gifted children may have difficulty in working with other children because they think so rapidly that they become impatient with the fumbling efforts of others who are slower than they are. The gifted need to learn to work with others, but they also need to be alone—perhaps more than the average child. Teachers should be aware that creative thinking very often requires solitude. They should not insist that every child participate in every group activity.

The above-average child can become a sort of consulting engineer for group projects. For solitary work, he should have access to puzzles which are more intricate and difficult than those for the rest of the group, paper-construction work which requires more than ordinary ability, and other materials and activities adapted to the capacities of the superior child. Some gifted children may show an interest in reading or writing during their kindergarten year. Although teaching this subject matter is not within the province of the kindergarten, such an interest should be channeled and encouraged. Gifted children may want to write on their pictures or dictate a short story to the teacher. Every encouragement ought to be given to these activities. Often bright children are unusually creative with language and they are capable of producing some interesting stories or poems.

Behavioral "problem children" are difficult to identify in the kindergarten because much behavior that would indicate disorder or maladjustment in an adult or older child is typical and therefore essentially normal for a child of kindergarten age. But kindergartners vary a great deal in the extent to which they are socialized. Close observation will help the teacher discover whether a child's apparent deviation is consistent with his general level of development or whether it is something requiring attention.

"Prevention of Accidents, Diseases, and Unfortunate Experiences"

The kindergarten teacher also plays a role in the prevention program. She should at all times observe, and help children to observe, the rules of safety so that accidents will be avoided. She also teaches children to avoid spreading or catching contagious diseases by using their handkerchiefs when coughing or blowing noses, washing their hands frequently, and obeying the doctor when ill. Children of kindergarten age characteristically have a great many respiratory and other communicable diseases. Although few deaths are caused by these childhood ailments,* serious complications, such as rheumatic fever, pneumonia, and heart disease, can result unless proper medical care is provided. The teacher should do everything in her power to help children to avoid or minimize the effects of illness.

The kindergarten teacher should be aware not only of children's physical needs but also of their psychological needs. She must warmly accept each child and give to each affection to satisfy his particular "hunger," neither overwhelming the child who seems to need very little nor starving the child who needs a great deal. She works always to maintain a comfortable, facilitating environment where children feel free and secure.

* Ruth Straug, *An Introduction to Child Study*, New York, Macmillan, 1951, p. 325.

"Early and Complete Diagnosis"

Fortunate is the school system which includes on its staff a nurse, physician, and psychiatrist or psychologist. More and more of our schools are adding such specialists to their staff, but many are financially unable to do so. In schools without specialized services for deviant children, the teacher obviously has greater responsibility for making tentative diagnoses and referrals.

Some schools have preschool "round-ups" in the spring at which time all children who will be enrolled in the following school year are given examinations by local physicians who volunteer their services. While many of these examinations are hurried and rather superficial, they may reveal unsuspected difficulties which can be remedied before the child even enters kindergarten.

"Education and Training"

Providing "education and training which will challenge each child's capacities and interests" is logically the business of the school at every level. For some deviant children, this may require referral to a special department of the school for at least part of the school day. Children who are unable to profit from regular classroom instruction or who need highly specialized care may spend all their time away from other children, in special schools or classes.

More and more educators are coming to believe that deviants need to associate with normal children and that they should be integrated with a regular group for at least part of the day. But some children cannot be successfully introduced into a class of normal youngsters.

Many exceptional children have several handicaps. "In practically all fields of the exceptional there is an average of at least two other handicaps per child."* Although it might be possible

* Harry Baker, *Introduction to Exceptional Children*, rev. ed., New York, Macmillan, 1953, p. 459.

to place a child with, for example, a bearing defect in a class of normal children, a child with both visual and auditory handicaps would derive little profit from an average class. For some exceptional children with multiple defects, even special classes may not be the answer. A child who is both deaf and partially seeing might be out of place in a group of deafened children who can see.

Another problem is posed by the children who are handicapped, but not quite severely enough to qualify them for specialized training. Ironically, as Baker points out, children who are rather severely handicapped generally receive a much better education than those who are only mildly handicapped.¹⁶

Perhaps the solution for these problems is to study each child individually before assigning him to a special class rather than to arbitrarily place all children with a certain type of handicap in a given group. Ideally, the child should be placed in the group in which he derives most benefit. It may be necessary for the hard-of-bearing child to be with similarly handicapped children so that he can learn, with the help of specialists, what sound is. But perhaps he also needs to be with normal children for part of the day.

Integrating the deviant child into a group of normal children sometimes presents certain problems in human relations, but the skillful teacher can turn these problems into opportunities for transmitting important social learnings. Young children are curious about almost everything, and the appearance of a "different" classmate is no exception. Children often appear to be unkind because so many of their remarks are brutally frank. However, if the teacher genuinely accepts deviating children, the other children in the group will learn to accept them. The teacher can prepare the way for the integration of an exceptional child by discussing differences among other children in the group—for example, in color of hair or eyes, size, etc. Pointing out such dif-

¹⁶ *Ibid.*, p. 481.

ferences, and demonstrating to the children that many people are sensitive about them, will help the children to learn tolerance and tact. Fortunately, most "fours" and "fives" accept other children rather readily, especially if the relationship between teacher and children is a good one.

"Nurture in All Areas"

The nurture of healthy children is in a sense the subject of this entire book. If it is to accomplish this goal, the school must concern itself primarily with children rather than with organization and administration. It must emphasize good mental and physical hygiene for children by controlling the emotional as well as the physical factors in the learning environment.

Good hygiene in the classroom begins with accepting the child as he is, with his problems as well as his potentialities; it means working with him and guiding him so that his full mental and physical potentialities are realized. It also involves concern for the emotions of the child.

The school has a responsibility for the mental health of all children, whether handicapped or not, as well as for their physical health. Because we have no clear-cut criteria of "normal" emotional and mental health, we are limited in resources. But this does not mean that we cannot give some help. Errors will inevitably be made, but the only alternative is to avoid action altogether, which ultimately might well prove to be a greater mistake.

The School and the Parents of Deviant Children

The school has another responsibility in the handling of exceptional children besides those described above. It must help the parents of such deviants to accept their children and to enable the children to live as satisfying a life as possible.

Unfortunately, many parents seem unable to accept the handicaps of their children, many are so disappointed by the

child's inability to fulfill their hopes and expectations that they forget the needs of the child. But the way in which the deviant child handles his problems depends in large part on the way in which his parents—and his teachers—act toward him. This is true for all children who have problems—the partially seeing, the hard-of-hearing, the crippled, and those with behavioral difficulties. The behavior of these children, like that of all other children, reflects the emotional climate surrounding them. This climate is created by the personalities and attitudes of the adults around them and by their understanding of and consideration for the children's feelings and needs.

Inability of the parents, through pride or ignorance, to face up to their child's handicap may lead them to deny the child the special treatment and attention he needs. The parents of a slow learner, for example, may attempt to explain away the child's difficulty on the grounds of his frequent illness and absence from school and so may refuse to permit the child to take advantage of the special educational provisions for slow learners. The parents of a child with behavioral problems may argue that the child has been "spoiled" and will get over it. Unwillingness to believe that the child is defective may even result in parental neglect of the child's physical difficulties. An infected ear may go untreated because "Bill's grandmother always had a running ear and he takes after her in many ways." A child whose hearing is so impaired that he needs to spend at least part of his school day with a special teacher may have a parent who deliberately refuses to recognize the hearing problem in the belief that putting the child in a "special room" will stigmatize him. Perhaps more important, the parent feels that the child's stigma will be attached to him, the parent, also.

Often a conference with the teacher can help parents to recognize the need for early treatment of their child's disabilities. Perhaps it is fortunate that most parents are very eager for their children to read well; the fact that the child's difficulty may slow

his reading development may persuade the parents to take remedial measures where other reasoning fails.

In schools in which deviant children are integrated either completely or partially with normal children, kindergarten teachers can help parents to understand the problems—and the assets—of their children. Whatever the nature and extent of his handicap, virtually every child has some positive feature which can be emphasized. A child who is crippled may possess superior intellectual ability; a child who is mentally retarded may have a very *engaging personality*. *Teachers can help parents to recognize their child's strong points so that they can more easily accept his handicap and help the child to do so.*

In many communities in which publicly supported facilities are not available, parents are forming groups to improve the opportunities of their young handicapped children. For children whose handicaps make it inadvisable or impossible for them to be integrated into the regular school groups, some parents have *organized and supported a special school, with the assistance of various community agencies and philanthropic organizations or individuals*. Parents are encouraged to participate in the activities of these schools to improve their understanding of their children. Working with other parents of handicapped children may help a parent to become more understanding of and sympathetic toward his own child. In some kindergartens for deviant children, parents participate in a weekly discussion period with school personnel. This brings the school and the home close together in the mutual effort to improve the educational opportunities for exceptional children.

The so-called "Heartbreak School," sponsored by the Adult Education Department of the Fresno (Calif.) City Schools, is an example of what can be done to help mentally handicapped children of preschool age and their parents. "Actually," says the director, "the parents are the pupils. The youngsters are the laboratory, or the functioning part of the school." The mother of every child enrolled in the school is required to attend a

special evening class held once a week and to spend one afternoon a week in the nursery school. Most of the parents agree that they have "developed a feeling of relief by association with other mothers and fathers of mentally retarded children."¹¹

Behavioral Deviations

Differences of opinion about methods of handling exceptional children are nowhere more evident than in our attitude toward children who manifest behavioral deviations. For some children what appears to be on the borderline of "bad" behavior may be "normal." For others it may be indicative of difficulty. Consider, for example, the child who is taught at home, as some children are, that fighting is a satisfactory way of settling differences, as contrasted with the child who in the past has solved his difficulties by some better means and who suddenly resorts to the use of physical force. Although the first child needs help in learning better ways of working and playing with others, fighting represents his normal behavior. He is acting as he has been taught to act. For the second child, the same kind of behavior indicates that something is causing him to regress in his ability to adjust to others. For behavior is caused, and personality maladjustments are learned.¹² This means, of course, that behavior must be studied, not merely classified, if we are to help the child in his adjustment.

A child's behavior cannot be judged by his actions in a few situations only. Many children who are problems at home become "angels" at school. For some the reverse is true. Adjustment is a matter of degree. Just as perfect adjustment is an unknown quality, complete maladjustment is rare and perhaps non-existent.

Behavior patterns in children which may result in serious

¹¹ Fresno, California, *Bee*, February 14, 1957.

¹² William H. Kilpatrick, *Philosophy of Education*, New York, Macmillan, 1951, p. 70.

disabilities in later life may appear to the teacher to be desirable. Children who are quiet, neat, and peaceable may seem like angels to the harassed teacher, but the shy, withdrawn child, the child who is too neat or exacting, the child who never fights or quarrels with others may become the neurotic adult. Such behavior is not "normal" for children, however desirable it may appear to the teacher. Fewer serious maladjustments result from the noisy, boisterous behavior which teachers find annoying. The child who is very aggressive or noisy may be masking a problem by his actions, but more likely he is merely "acting his age."

Many factors relating to home and family may influence the behavior of children. Many children have experienced divorce, and all that it may entail, even before entering kindergarten. Some children are rejected or neglected by their parents; some have experienced the death of a parent. Differences in religion between parents, the child's position in the family in relation to older or younger siblings, the birth of a sibling, the fact that a child is adopted—all these factors may affect behavioral adjustment. The classroom teacher can handle some problems by giving the child opportunities to work out his aggressions or feelings of hostility by no more complicated mechanism than a punching bag, or she may merely supply a sympathetic and understanding ear to help the child adjust to his difficulties. Other children need the help of specialists.

The Mentally Retarded

Although estimates of the percentage of mentally retarded children in the school-age population range from 2 to 5 per cent,¹⁸ in many communities the mentally retarded child is denied early school experiences because of the lack of publicly supported

¹⁸ *Helping Parents Understand the Exceptional Child, Proceedings of the Annual Spring Conference on Education and the Exceptional Child, Langhorne, Pennsylvania, Child Research Clinic of the Woods School, May 1952, p. 37.*

facilities for his education. Today only about 11 per cent of all mentally retarded boys and girls are being adequately served by special programs of education. There are even fewer educational facilities for mentally handicapped children under the age of six.

It is difficult to diagnose the extent of mental retardation in very young children. In many instances other complicating factors, such as shyness or general insecurity with a strange person, may be present when the child is tested. Nevertheless, mere observation confirms the fact that there are wide variations among the mentally retarded, in range of abilities and in needs and problems. It is probable that the more severely retarded will have to be cared for elsewhere than in the public school. However, many children who have difficulty adjusting to the learning situation must be the responsibility of the schools.

The slow-learning child usually has the same basic needs and the same general appearance as other children. He feels the same need to succeed and the same desire to learn, provided that the tasks set for him are not beyond his ability. The child who is low in academic ability is most like other children in physical abilities and emotional reactions and least like his peers in his ability to handle abstractions and symbols. The retarded child may run and jump as well as those of his own chronological age, but he fares less well in language activities. This type of child, then, needs many experiences which are concrete, activities which give him the sense experiences of hearing, smelling, and touching. Within the range of his abilities, the slow-learning child can perform well, and if he has genuinely worked at his highest level he should be given adequate recognition for what he has accomplished, even if his performance appears inferior in relation to that of others in his group.

Kindergarten experience can be very valuable in helping children who, because their response to their environment is apparently limited, may be misclassified as retarded. Usually such children have had little group experience; they are shy,

insecure, and anxious. They have difficulty adjusting to new situations and to strange people. Without experience in kindergarten, these children might withdraw into themselves so that their real abilities would remain hidden for a long time.

Visual Handicaps

It has been estimated that nearly 40 per cent of all school children have some visual defect requiring correction if not special educational provisions.¹⁴ It is obvious that children who are partially seeing are severely handicapped in a situation which depends on sight as much as most school programs do. Normal children receive approximately 87 per cent of their sensory impressions through their eyes.¹⁵ If this avenue for impressions is cut off through total blindness or restricted through partial vision, the child is deprived of a source of stimulation necessary for mental maturation and his capacity for social participation in play and recreation is limited.

The problems of the visually handicapped child may not loom so large in the kindergarten as they will later in his school career, when greater demands will be made on his sight. Nevertheless, for the child who is visually handicapped, special provisions should be made, even in the kindergarten. He needs good lighting on his work, dull rather than glazed paper, a minimum of detail in pictures, books with large type, and soft writing materials. He should be given many opportunities to touch things and to use his ears to compensate for his defective vision whenever possible.

Auditory Handicaps

Although defective hearing is frequently overlooked, it has been estimated¹⁶ that "the number of severely handicapped

¹⁴ Horace English, *Child Psychology*, New York, Holt, 1951, p. 268.

¹⁵ *Ibid.*, p. 326.

¹⁶ Baker, *op. cit.*, p. 98.

hard-of-hearing needing the special type of class is probably almost as great as the partially seeing, since the number of the totally deaf is approximately equal to the blind."

Deafness brings with it a certain amount of insecurity, yet on the whole deafened children seem to have fewer fears than their normal age mates.¹⁷ Their greatest problems are social and educational. They lag behind other children markedly in the area of social adjustment because of their inability to communicate. Many deafened adults have developed serious personality problems. Because they cannot hear what is being said, they have come to believe that people are talking about them and therefore are suspicious and distrustful. Children may also develop some emotional difficulties because of their inability to understand others or even to make their own wants or needs known.

Children with hearing difficulties should be given every possible aid in understanding what other people are saying, including lip-reading instruction. Children who are seriously handicapped aurally should have a carefully fitted hearing aid, in order to make as much use as possible of the hearing they do have. In addition, partially and wholly deaf children need special training in speech; because they are unable to hear many sounds clearly, they may be unable to reproduce sounds accurately. The average classroom teacher lacks the special training needed to help the child to develop these skills, but she can refer children who are aurally handicapped to the proper specialists.

Speech Handicaps

Not only children with hearing defects but also many children with normal hearing ability may have serious speech handicaps. Estimates of the number of speech-handicapped children vary, depending on how "speech defect" is defined by each in-

¹⁷ Strang, *op. cit.*, p. 277.

investigator, but some investigators state that as much as 10 per cent of the school population is so afflicted.¹⁸

Stuttering, perhaps the most common of the speech problems, occurs in about 1 per cent of the school population. It is more characteristic of the mentally retarded than of normal children and is four to five times as frequent among boys as among girls.¹⁹ However, as we have pointed out in earlier chapters, stuttering among kindergartners, like many other apparent speech defects, may be a maturational characteristic. The child of this age may stutter because his vocabulary is inadequate to express his thoughts; or his stuttering may be the result of the tension produced in attempting to adjust to the school environment. Stuttering at this age may be essentially normal.

The treatment of persistent stuttering should be left to the specialist, but the teacher can help the stutterer by maintaining a calm and facilitating attitude when the child is trying to speak and by encouraging him to take his time in speaking. She should not force the child to speak to the group and she should use all the patience and understanding at her command to help the child learn to accept his own stuttering calmly so that he can more easily overcome it. As English²⁰ says, "It is the disorder of stuttering speech that she must let alone, not the stuttering child. . . . Her role is more like that of the nurse who makes the patient comfortable than that of the physician who prescribes treatment."

Many children with seeing or hearing difficulties develop emotional problems related to their disability. But often the child with defective speech may become even more disturbed because adults tend to be less understanding of his handicap than they are of visual and auditory handicaps. Many adults feel that overcoming a speech handicap is merely a matter of will; yet, as

¹⁸ Roy D. Willey, *Guidance in Elementary Education*, New York, Harper, 1952, p. 661.

¹⁹ Strang, *op. cit.*, p. 436.

²⁰ English, *op. cit.*, p. 320.

garten. The child who is in poor general health is usually not a happy child, and to the degree that he is unhappy he is lacking in adjustment. The child who lacks physical vigor is often absent from school; he is isolated much of the time from other children, and he receives an undue amount of attention from adults. Such children tire easily and, although they appear to be quite normal, they have more than their share of illnesses. Both Willey²³ and English²⁴ estimate that two thirds of the children in school have some health problems.

Children who are not adequately nourished do not have the vitality of other children—and an appalling number of children are not adequately nourished. If to the number of children undernourished because of poverty we add those who, though not poor, are undernourished because they are improperly fed, we see malnutrition "in its proper light as a major national problem."²⁵

It is important to the general welfare of children that the school make every provision possible to safeguard their health from their earliest years in school. This should be done by providing both adequate health services and an intensive, well-planned health-education program beginning in the kindergarten and continuing through high school and college. Concern for the health of the school child is one of the cardinal principles of education.

Problems for Discussion

1. Mrs. Porter's son has a deformed ear which is kept bandaged so that no one can see it. The boy is in your kindergarten. Although he plays well and happily with the group, the bandage excites curiosity on the part of the other children. How would you handle this situation with the children? with the child's mother?

²³ Willey, *op. cit.*, p. 194.

²⁴ English, *op. cit.*, p. 279.

²⁵ *Ibid.*, p. 266.

2. What "significant items of behavior" might help the teacher identify a hard-of-hearing child? a mentally retarded child? a gifted child?
3. Mary appears to be timid at school, but her mother says that she is really a very "naughty" child at home. What do you think causes these differences in her behavior? Is it possible that there are actually no differences in her behavior in the two situations? Assuming that Mary acts at home about as she behaves at school, how can you explain the fact that her mother considers her "naughty"?
4. What information from a home visit might be helpful to you in discovering the cause of a child's difficulties in adjustment?
5. How would you help a partially-seeing child during "show-and-tell" time? How would you help such a child during story hour?
6. Observe a kindergarten group and note irregularities in speech. What is the reaction of the group to these children's difficulties? What is the role of the teacher in such situations?

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17. School, Parents, and Community

Educationally we have been moving, during this century, from a book-centered to a life-centered school—to a school that recognizes what it can contribute to, and gain from, the community of which it is a part. Today we realize that the public school cannot function in isolation, for it is the cultural expression of our democratic way of life. Unique as each child is, he possesses certain needs in common with other children which can be met only through a functional interchange between the school and its community.

The agencies and individuals that make up the community can contribute to the work of the school by participating in educational activities inside and outside the school, by recognizing their obligation to teach children about the larger world beyond the classroom, and by welcoming children as visitors to observe the work of the adult world. While the school has an obligation to understand the community and to take part in community affairs, the community must also work to understand and improve its children's school. In some communities groups of businessmen and of teachers visit each other at work so that the businessmen in the community come to understand the schools and the teachers learn about the local industries. Such an interchange helps both groups work more closely together in further-

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17. School, Parents, and Community

Educationally we have been moving, during this century, from a book-centered to a life-centered school—to a school that recognizes what it can contribute to, and gain from, the community of which it is a part. Today we realize that the public school cannot function in isolation, for it is the cultural expression of our democratic way of life. Unique as each child is, he possesses certain needs in common with other children which can be met only through a functional interchange between the school and its community.

The agencies and individuals that make up the community can contribute to the work of the school by participating in educational activities inside and outside the school, by recognizing their obligation to teach children about the larger world beyond the classroom, and by welcoming children as visitors to observe the work of the adult world. While the school has an obligation to understand the community and to take part in community affairs, the community must also work to understand and improve its children's school. In some communities groups of businessmen and of teachers visit each other at work so that the businessmen in the community come to understand the schools and the teachers learn about the local industries. Such an interchange helps both groups work more closely together in further-

ing their common goals: to better educate their children and to make the community a better place in which to live. By paying more than lip service to the idea that a community is a vital social force, the school can transform the community into a kind of school—a school where democracy becomes a living, functioning concept.

The school can also contribute to the community. Often even young children can render small services to improve the general welfare; for example, they can make special holiday decorations for the wards in a children's hospital, share some of their toys with less fortunate children, or invite a local policeman to talk about how they can help to make life safer for everyone. These may be very small contributions from an adult standpoint, but all these activities reinforce the bond between school and community and demonstrate to children that everyone can contribute to community living.

The school enriches the life of the community by sharing such school facilities as shops, game rooms, gymnasiums, libraries, and so on. It is wasteful to bar the school door after the close of the school day so that the school's vast possibilities are realized by only one segment of the population for only a limited number of hours per day and for only a portion of the week. Education which is genuinely democratic helps people, old and young, to live more effectively and happily as individuals and as members of their social group.

The newer philosophy of education realizes that the school is only one force in the education of the child. As Ryan¹ points out:

The school needs to see itself, not in any sense as the exclusive educational agency, especially where human personality is concerned, but as one significant agency; an agency that has not yet fully realized its opportunities and which cannot realize them

¹ W. Carson Ryan, *Mental Health Through Education*, New York, The Commonwealth Fund, 1938.

without close relationships with all other forces in life that bear upon growth and development of human beings, including especially the parent and the home.

Except for a few rather specialized skills, the child learns as much in his home and in his community as he does at school. Instead of shutting out these powerful forces for education, the modern school draws these sources of strength to itself. Schools become meeting places for youth and adult groups; they co-operate with the Red Cross and other service organizations by providing space for their activities or by enlisting the help of children in the work of packing food parcels, addressing mail, making special holiday cards for the food trays of hospitalized veterans, and so on. They encourage children to participate in civic projects.

Even the kindergartners can contribute to community affairs, at their own maturity level. "Fours" and "fives" can help to gather plants or seeds for a civic beautification project. They may even assume the entire responsibility, with the help of their teacher, for one small flower bed within easy access of the school, or they might improve the lawn of the school by planting grass on the bare spots. More mature kindergartners may interest themselves in discovering safety hazards in the neighborhood of the school and reporting them to the proper authorities. Children who become part of these larger community enterprises gain experience and insights which can enrich their whole school experience. They become more valuable contributors to the welfare of the school as well as of the community.

If schools are to promote the development of the whole child in relation to his total environment, education must be a community-wide concern. The school together with the community becomes the functioning unit; neither can accomplish the task without the other. In a school which holds to this philosophy, children go out into the community to observe how people work and play and how they coordinate their efforts to improve the welfare of all. The walls of the classroom expand to take in the

whole community. Even the youngest children in the school are eager to explore the world about them.

Seeing the community working as a whole, children learn to appreciate and understand the efforts of the social group to meet human needs. They see what a practical matter co-operation is. And this working together in common interests helps adults and children understand each other better.

School-Parent Relationships

If children are to realize their full potentialities, all agencies concerned with their health, education, and welfare should work together. Because the home is one of the most important of these agencies, teachers must be concerned with parent-school relationships.

Not so very long ago, there was no need for home and school to plan together, because they were one and the same. The curriculum for the child was determined by the demands of life in the family and the community. Children were taught, more or less informally, by parents or older members of the family. In this setting the child learned what was necessary for survival and good living in his cultural group; by this means he was taught the mores of his group and the means of earning a living. As the school took over more and more of the education of the child, the parent was pushed farther and farther away, until he had little to say in the educational plan for his children. It was accepted that parents could claim responsibility for children at home, but there was no place for parents in the school. When it was finally recognized that parents should participate in the work of the school, they were invited to "meetings." On the whole, teachers viewed these gatherings as occasions for disseminating "pearls of wisdom" to parents; just as children of that day were expected to sit passively and listen, the parents were expected to listen and learn. And just as we today are aware that children learn more effectively when they participate ac-

tively in the learning process, so we now recognize also that the parents can profit more from the teacher's knowledge of their children if they are encouraged to participate in the children's school education.

Today we realize that parents are perhaps the single greatest asset of the schools. Without their assistance and support the community school could not exist and the objectives of education could not be reached. The education of a child requires continual careful planning based on the pooled experience and intelligence of the school and the family, so that development can proceed in desirable ways, in harmony with the demands of society and with the potentialities of the individual. Parents are the best source of information about their children. Working as partners of the school, they can help greatly to further the goals of education.

Every child brings his home and family with him to school. He carries them with him in his knowledge and general background, in his beliefs about himself and others, in his ideas about religion, and in his other attitudes. In order to provide the best possible environment for the growth of children, the school needs to know the home. Healthy home-school relations grow only out of the conscious efforts of both parents and teachers working together. Teachers should be welcomed into the home and parents into the school. Parents need to know what the school is trying to accomplish in educating their children. The teacher needs to know what the parents' goals are for their children.

In some communities mothers take turns spending a day at school helping the kindergarten teacher in oversized classes or making it possible for the group to engage in activities which it could not undertake with only one adult present. Often the parent-teacher organization interests itself in the welfare of children whose parents are unable to pay for the midday lunch or to provide other needs. If children have lunch at school, mothers may come to assist the regular employees in making the usually hectic lunch period run more smoothly. Sometimes

mothers contribute their time and materials by making aprons or smocks to protect children's clothing for painting or other messy activities. In some schools "room mothers" are chosen who sponsor social events such as Christmas or Valentine parties, assist nurses and physicians at inoculation clinics, or help with excursions. The teacher should bear in mind, however, that room mothers are not chore girls and should not be asked to do only the bothersome things that teachers themselves dislike doing. They should experience with the teacher the joys of being with children as well as some of the necessary routine tasks.

Many parents—fathers as well as mothers—have cultural contributions to make. A Mexican parent may come and sing folk songs to the kindergartners, a Chinese parent may come during "kite" season and tell about "Boy's Day" in China, or a Negro parent may come to share his rich heritage of spirituals with the children. In these and many other ways, parents can see the work of the school at first hand and can actively participate with teachers in educating their children. Even if parents have nothing to contribute directly to children, the teacher should welcome their presence in her classroom, for occasional visits will help to make the objectives of teachers and parents one.

To provide home and school environments conducive to wholesome attitudes among young children, parents and teachers should have wholesome attitudes toward each other. They should respect each other and appreciate the role each is playing in the education of children. They should have common goals for the kindergarten child and know how they can together work toward these goals. This means that both teachers and parents should know something about how children grow and, further, that they should be able to communicate well with each other. Teachers and parents both want to help the child make the most of his potentialities. When relations between these two educative agencies are harmonious, they can accomplish much more through co-operative efforts than either school or home could effect individually.

Group Meetings of Parents and Teachers

The parent-teacher organization is probably the most common meeting ground for parents and teachers. However, in certain situations, large PTA-group meetings may not be so effective in solving common problems or building good relationships as smaller meetings. The PTA often is very efficient in uncovering problems, but it is sometimes ineffective in solving them—perhaps, as Hymes² suggests, because it frequently cannot concentrate on a given problem for the period of time necessary to resolve it. Nevertheless, many PTA's are dynamic organizations which do much to improve the life of the school. Attendance at meetings of this organization can help parents to understand the function of the kindergarten in terms of the total school program.

Recently there has been some tendency to supplement the monthly meeting of parents and teachers with room meetings, in which parents can find help from others concerned with children of approximately the same age and experience. In these smaller groups, there appears to be more freedom of expression and community of interest than in the larger, more impersonal group. This trend marks a step forward toward more personal relationships between parents and school.

Whether the meeting of parents and teachers is large or small, formal or informal, teachers should not conceive of it as an opportunity for "parent education" in the sense that they tell parents what to do or where they have made their mistakes. Parent education, no less than the education of children, is most effective when it is carried on democratically, with the learner as well as the teacher contributing. Unless there is a flow of ideas in both directions, the energy, creativity, and leadership which many parents can display will not be utilized for the good of their children.

Teachers should encourage parents to do most of the talking

²James Hymes, Jr., *Effective Home-School Relationships*, New York, Prentice-Hall, 1953, p. 87.

ing from eyestrain, she may suggest that the parent make some observations at home. Teacher and parent can compare their findings at a subsequent conference and plan steps to remedy the defect. Perhaps the teacher has noticed that the child appears to ignore much of what is said to him. In this case she may wish to ask parents to observe this aspect of the child's behavior at home or to see to it that they give sufficient attention to the child when he is talking so that he does not develop the habit of ignoring because he is ignored. Needless to say, if the child appears to be normal and well adjusted and if he is making satisfactory progress, the teacher should not be chary of praise for the child and his parent. Parent-teacher conferences should not be limited to meetings to discuss "problem children."

In addition to its many other values, the conference can be an important source of education for the teacher. She may discover factors in the child's home life that affect or account for his behavior at school and so become better able to provide for his needs. She may even discover faults in her own personality or method of teaching that she had not suspected.

The conference should focus on the child's social, emotional, intellectual, and physical needs at his stage of development and ways in which the home and school can work together in satisfying them. The kindergarten teacher will want to tell the parent something of the program of activities for four- and five-year-olds and explain why certain things are done with children at this level while others are postponed until later in his school career. This aspect of the conference is especially important if the school has had no previous contact with parents. The teacher may wish to indicate to the parent what kinds of activities she plans for the children to accomplish certain objectives, and she may make suggestions as to how parents might help at home to strengthen the learning. She might, for example, explain the various activities used to help children perceive likenesses and differences and so get ready for reading; then she might suggest how parents can help by playing informal games with children

to improve their observation. While she is performing such tasks as peeling potatoes, the mother can ask the child which potato is the largest, how the color of the pan differs from that of the kitchen counter top, how the number 6 on the clock differs from the number 9, how 10 differs from 11, or how the child's shoes are different from or similar to his mother's. Making such suggestions not only helps parents to understand and aid the work of the school but may also point to ways of improving their relationships with their children.

During the conference, the teacher should encourage the parents to ask questions concerning the work of the school or the growth of children. Teachers can often help parents find solutions to some of their problems. A parent might ask, for example, how she can handle her kindergarten-age child who is jealous of his younger brother or sister. Skillful questioning on the part of the teacher may help the parent to get a fresh perspective on the problem. The teacher might ask: How old is the other child? Was the older child prepared for the coming of the baby? How much time do you give the older child all by himself? Is he expected to have the younger tag along after him all the time? Is it possible that the older child does not get enough attention?

In talking with parents, the teacher needs to emphasize the child's abilities before launching on a discussion of his disabilities. Parent-teacher conferences are not a time for the teacher to tell the parents all the things she dislikes about their child. Discussion of the child's weak points needs to be "sandwiched" between compliments or parents will hesitate to return for further conferences. Parents like to talk about their children, and often, with a few suggestions on the part of the teacher, they will reveal some of the child's weak points and how they feel about them. Again, it is better for parents to initiate the discussion than for teachers to do so.

At the end of the conference, the teacher should make a record of any decisions that have been reached which can be

used as a basis for instituting proper procedures and for future conferences. Some school systems use a form which the teacher fills out during the conference, indicating the date of the meeting, the name and age of the child, any significant items concerning his behavior, and the results of the meeting with parents.

Home Visits

Teachers who wish to understand the behavior of children will find that they are eventually led to study the home. Although not all behavioral deviations can be attributed to broken homes or "bad" homes, the answers to many problems lie in home factors. The sib pattern of a child—whether he has older or younger brothers or sisters—may mean that the child has responsibilities beyond his years or, at the other extreme, is overprotected. The only child may develop problems related to his isolation. The socioeconomic status of the home may influence child behavior, even at the kindergarten level. The child of an invalid mother probably will be different in many respects from the child of a vigorous, athletic mother. The teacher will understand all these factors more clearly if she visits the home.

Most parents co-operate eagerly with anyone who is seeking the well-being of their children. The teacher should show consideration of the busy mother by arranging for her visit in advance. Young children especially delight in the teacher's coming, and they can be very helpful in paving the way even with a reluctant parent. The teacher should adopt the same easy and unpretentious manner in visiting the home of a child as in calling on her friends or on a new neighbor. A visit to the home makes no more demands on social skill than these familiar activities.

Reporting to Parents

The problem of reporting to parents of kindergartners about the progress of their children has always been a difficult one.

Because young children change so rapidly in many developmental aspects, reports rapidly become outdated. In some areas of development the child may remain on a plateau for some time, showing no measurable change, only to spurt ahead suddenly. Children do not grow in weekly or monthly increments that lend themselves to a rigid system of reporting; indicating a child's progress on a report card may be very difficult at the kindergarten level.

When parents work closely with teachers to become actual participants in the school program, they depend less and less on written reports about their children. There is a trend toward issuing formal reports less often and informal reports more frequently than formerly. Parent-teacher conferences are taking the place of formal reports in many areas. After parents become accustomed to the newer methods of finding out about children, they no longer feel a need for a monthly report card.

No one system of reporting a child's progress at school solves all the problems involved, but some methods appear to be better than others, particularly for the young child. Casual, friendly notes from the teacher to the parents can explain what the child is doing and how much progress he is making. Work sent home with the child, with comments by the teacher concerning his accomplishments, gives the parent assurance that the child is growing at a satisfactory rate *for him*, even though the child next door may be growing more rapidly.

Changing the method of reporting to parents usually necessitates a change in the kind of records the school keeps on growth in children. Records and reports reflect the philosophy of a school; what is put into records and the use that is made of the information indicates what the school deems important. Unfortunately, however, the practice of recording and reporting often lags behind theory. Many schools have developed logical and useful forms of recording but have not yet learned to use the records wisely, for the benefit of the child, and with increasing skill in separating objective data from subjective data.

Records should be regarded as a means to an end rather than

as an end in themselves. Their purpose is to ensure that the school is providing the best possible educational environment for the individual child, in the light of his particular developmental level and his unique problems, and that the child is developing to his full capacity. Thus they can help teachers do a better job of teaching and can create better understanding among the school, the home, and the community with the result that education for children is improved.

Records must be understandable. They should be sufficiently detailed to be meaningful, but not so lengthy that they become difficult to assess. Ample time should be provided for keeping the records, but not so much as to detract from the important job of teaching. All records, whatever their form, should be characterized by simplicity and should be so organized that repetition is kept to a minimum. Records are useful only in so far as the data recorded are accurate and free of bias.

Teachers should have a part in developing record systems and designing the forms to be used. Since they are the ones who will make most use of records in any school, they should participate in deciding what information should be part of proposed records.

The cumulative record, which is an account of the child's history in school, is one of the most useful forms of recording developmental progress. There is a trend away from the single-sheet record to the folder type, which permits inclusion of samples of the child's work, test results, anecdotal records of the child's behavior and attitudes, and other important data. This represents another forward step toward concern with the whole child rather than merely with his achievement in subject matter or his attendance record. The cumulative record is a synthesis of all data concerning the child; it forms a core of significant information to which each teacher contributes. Data must, of course, be accurate and entries must be made regularly.

If cumulative records are to be really useful, teachers at all

levels must understand the kinds of information to be recorded, the manner of recording it, and the system by which they pass the records on to the next teacher. There should also be reciprocity between schools, so that essential information can be sent to any other school to which a child transfers.

In many kindergartens, teachers use anecdotal records in order to round out the general picture of the child presented by more formal means. Anecdotal records are usually concerned with some aspect of the child's behavior or with incidents in the child's life which the teacher believes to be significant for understanding him and planning more adequately for him. Such anecdotal records are of little value unless they are objective. The teacher should make every effort to report what actually took place, recording conversations and incidents as accurately as possible and without intruding her personal opinion or evaluation. "I think" and "I believe" should be reserved for places other than anecdotal records.

The anecdotal method of making periodic reports concerning children is essentially cumulative. Over a period of time, the data are interpreted in relation to other data. If the records are properly prepared, they can become a valuable supplement to other sources of information describing the child's progress through school.

In studying the cumulative records, data should be evaluated in terms of the capacity and previous growth of the individual child and, *within limits, in terms of the growth of his age mates.* Norms should never be rigidly applied to children; comparison with the child's own previous record is the best single index of his progress. However, norms can be useful as guideposts in the measurement and evaluation of growth in children.

Schools have special responsibilities in recording information about children who deviate from their peers physically, emotionally, or mentally. Only the school with a functional system of record keeping which constantly reveals the special abilities and disabilities of these children can meet their unique needs.

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Schools have special responsibilities in recording information about children who deviate from their peers physically, emotionally, or mentally. Only the school with a functional system of record keeping which constantly reveals the special abilities and disabilities of these children can meet their unique needs.

The best evidence that these needs are being met is a synthesis of data kept over a period of time which describes the child's growth and progress in terms of his own previous record.

Problems for Discussion

1. What is the meaning of the statement, "The school is the cultural expression of our democratic way of life"?
2. List as many sources of education for young children as you can other than the school. These need not be organized agencies. Try to estimate how much time the child spends daily with each of these sources as compared with the three or four hours he spends in kindergarten.
3. Your principal has asked you to take the responsibility of planting some flowers in front of the school. How would you go about planning this with children? What "subject areas" would be involved in such a venture?
4. What "individual differences" might you expect to find in a group of parents? Can you expect the range of these differences, on the whole, to be greater or less than in a group of kindergarten children? Why?
5. List some of the questions you would wish to bring up in a conference with a parent. Reverse roles and indicate some questions that you as a parent would want to ask of the teacher.
6. How would you go about planning for a visit to the following kinds of home:
 - a. the home of the most esteemed politician in the city.
 - b. a home where no English is spoken.
 - c. the home of parents you know to be hostile to the school.
 - d. the home of a "normal" child from an "average" family.
7. Suppose that you are chairman of a committee of teachers appointed by your school administrator to study report forms and recommend changes. How would you go about planning this task? Whose help would you enlist? Outline your plans.
8. In what sense do records and reports reflect the philosophy of a school?
9. Observe a group of kindergarten children. Select one child and observe his behavior for a short time, then write an anecdotal

record of what took place. What did you find most difficult in this kind of record keeping?

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The Concept of Readiness

A concept basic to good teaching is that all children pass through certain developmental stages and in a certain sequence. Each stage depends on the one which has preceded it, and, although children's rates of growth vary greatly, all children pass through the same orderly process.

Every day of his life, the child becomes ready for some new experience; at every stage in the growth cycle, he is better prepared experientially and intellectually for certain learnings than he was previously. Not all children are ready at the same time for the same thing, but every child, as a learning organism exploring his environment and integrating his experiences in his own unique way, is learning something new every day. With this continuous growth and reorganization of experience comes increasing ability to profit from learning which held little meaning before. Children do with great difficulty at four years of age many things which they are able to accomplish with ease and confidence at five, when they have greater maturity and experience. "Readiness" is the term used to express this concept. Readiness and maturity are not synonymous, but it is difficult to distinguish one from the other.

From the standpoint of the teacher, readiness implies allowing the child to determine when he should be introduced to a new learning. The teacher should not rush the child into learning to read or write. Nor should she delay the learning if the child is ready for it long before his age mates. Forcing children into tasks for which they are not ready results in much waste of effort and time for teachers and children alike. Maturity factors, as many investigators² have demonstrated, are of primary importance in all learning.

"Readiness" means different things to different people, but

² See A. Gesell and H. Thompson, "Learning and Growth in Identical Twins: An Experimental Study by the Method of Co-Twin Control," *Genetic Psychology Monographs*, 1929, XXIV, 1-258.

it is generally agreed that it is based on a combination of factors concerned with the physical, mental, social, and emotional maturity of the child as well as with his general experiential background. The child's development in each of these areas is, to a large extent, a *matter of time*; adults must wait for maturation to take place. Nevertheless, the kindergarten can do much to stimulate this growth.

Physical Factors in Readiness

Among the physical factors to be considered in relation to readiness are vision and hearing. The child with uncorrected visual difficulties or faulty hearing will be less ready for the work of first grade than the child who does not have these handicaps. Speech defects and generally low vitality also have an adverse effect on readiness. Because good physical health is so important to the child's success in formal school work, kindergarten teachers should be especially alert in observing children so that measures can be taken early to remedy any physical defects.

The ability to coordinate eye and hand is a skill important to reading. This skill, of course, is largely dependent on normal physical development, but it can be encouraged and furthered through kindergarten activities. Larger muscles are developed through gross motor activity, such as building with large blocks, and rhythmical activities, such as hopping, skipping, and dancing. Oculomotor control is improved through hammering, bouncing balls, watering plants, cutting and coloring, drawing, building, and buttoning clothes.

The exercises listed below can also help to develop the child's motor abilities.

1. Have children trace a form—circle, square, etc.—trying to keep on the line.
2. Have children cut out forms, trying to cut on the line.

18. On to First Grade

The kindergarten exists for the primary purpose of enabling four- and five-year-olds to live a rich and satisfying life at their stage of maturity. It supplements the home and community, offering experiences which these agencies cannot so easily provide. But it also has the responsibility of ensuring that the child grows and develops at the maximum possible rate in every area. It attempts to provide a challenging environment which will stimulate the child's intellectual, social, emotional, and physical progress and in which, through a variety of experiences, he will add daily to his skills and learnings.

The step from kindergarten to first grade is a tremendous one, perhaps the greatest in the educational ladder. Because of "the formality, the necessity of beginning to read, to carry out orders, to walk in a line," entrance into first grade constitutes "the first real threat in the actual structure of the child's personal-social development."¹

Much can be done to help the child bridge this difficult gap in his school career. Kindergarten and first-grade teachers can so arrange activities and experiences that the child makes the transition from the freedom of the kindergarten to the more formal

¹ Cecil Millard, *Child Growth and Development in the Elementary School Years*, Boston, Heath, 1951.

learning situation of first grade easily and naturally. The first-grade teacher, for example, might invite the kindergartners, perhaps in small groups, to visit her classroom so that they get a taste of the experiences to come. Joint play sessions or holiday observances might be planned for the two groups of children—supervised, of course, by both teachers.

The kindergarten teacher is in a position to make the greatest contribution to the child's adjustment to first grade. By planning a program to develop good work habits in children, for example, she can improve the likelihood of their success in first grade. The child in the well-planned kindergarten learns to respect the rights of others by sharing and taking turns with material and equipment. He learns to work independently for increasing amounts of time, using materials effectively and economically. He learns to follow, within the limits of his maturity, a reasonable schedule. He learns to finish his work satisfactorily for his level of development. The kindergarten provides an environment in which the child can develop all his abilities and can learn to think and use his native tongue. In the well-planned kindergarten the child has opportunities to accumulate a rich store of experiences and understandings, so that he brings an adequate background to the learnings that will be expected of him as a first-grader.

In this chapter, we have suggested several ways in which the kindergarten teacher can prepare children for more specific learnings in the first grade, by means of games and exercises designed to develop children's motor abilities and perceptual acuity. It should be pointed out that many teachers do not feel that such formal procedures are necessary or desirable in the kindergarten. Nor does the present author suggest that they necessarily be used. Each individual teacher will have to decide this issue for herself, on the basis of her knowledge of the children in her class, their readiness for learnings in each area, her own philosophy of teaching, and the administrative policies of the school.

The Concept of Readiness

A concept basic to good teaching is that all children pass through certain developmental stages and in a certain sequence. Each stage depends on the one which has preceded it, and, although children's rates of growth vary greatly, all children pass through the same orderly process.

Every day of his life, the child becomes ready for some new experience; at every stage in the growth cycle, he is better prepared experientially and intellectually for certain learnings than he was previously. Not all children are ready at the same time for the same thing, but every child, as a learning organism exploring his environment and integrating his experiences in his own unique way, is learning something new every day. With this continuous growth and reorganization of experience comes increasing ability to profit from learning which held little meaning before. Children do with great difficulty at four years of age many things which they are able to accomplish with ease and confidence at five, when they have greater maturity and experience. "Readiness" is the term used to express this concept. Readiness and maturity are not synonymous, but it is difficult to distinguish one from the other.

From the standpoint of the teacher, readiness implies allowing the child to determine when he should be introduced to a new learning. The teacher should not rush the child into learning to read or write. Nor should she delay the learning if the child is ready for it long before his age mates. Forcing children into tasks for which they are not ready results in much waste of effort and time for teachers and children alike. Maturity factors, as many investigators³ have demonstrated, are of primary importance in all learning.

"Readiness" means different things to different people, but

³ See A. Gesell and H. Thompson, "Learning and Growth in Identical Twins: An Experimental Study by the Method of Co-Twin Control," *Genetic Psychology Monographs*, 1929, XXIV, 1-258.

it is generally agreed that it is based on a combination of factors concerned with the physical, mental, social, and emotional maturity of the child as well as with his general experiential background. The child's development in each of these areas is, to a large extent, a matter of time; adults must wait for maturation to take place. Nevertheless, the kindergarten can do much to stimulate this growth.

Physical Factors in Readiness

Among the physical factors to be considered in relation to readiness are vision and hearing. The child with uncorrected visual difficulties or faulty hearing will be less ready for the work of first grade than the child who does not have these handicaps. Speech defects and generally low vitality also have an adverse effect on readiness. Because good physical health is so important to the child's success in formal school work, kindergarten teachers should be especially alert in observing children so that measures can be taken early to remedy any physical defects.

The ability to coordinate eye and hand is a skill important to reading. This skill, of course, is largely dependent on normal physical development, but it can be encouraged and furthered through kindergarten activities. Larger muscles are developed through gross motor activity, such as building with large blocks, and rhythmical activities, such as hopping, skipping, and dancing. Oculomotor control is improved through hammering, bouncing balls, watering plants, cutting and coloring, drawing, building, and buttoning clothes.

The exercises listed below can also help to develop the child's motor abilities.

1. Have children trace a form—circle, square, etc.—trying to keep on the line.
2. Have children cut out forms, trying to cut on the line.

3. Have children fit together such objects as nested cubes, pegboards, and simple jig-saw puzzles.
4. Write each child's name on a piece of paper and have him trace it with a pencil or crayon. Then have him try to copy the name without tracing.

In these activities the child should be permitted to use his preferred hand. If he is ambidextrous, the teacher can help him to make a choice and develop a preference after determining by experiment the hand which is used most frequently and has the better control.

The kindergarten gives the child many opportunities to learn auditory discrimination through games, poetry, and jingles. (See suggestions for games in Chapter 9.) While the primary purpose of reading poetry to the young child is enjoyment, poetry can also help children to recognize similarities and differences in sounds. Music can be used in like manner; the child matches tones, he tells whether the tones go up or down, or the teacher may suggest that the children begin singing after she has sung a certain number of phrases. This helps to develop the ability to attend as well as to hear sounds.

Such games as the following can also help to develop auditory discrimination:

1. *Clapping*—Have children form a group and clap out a pattern, such as two claps, one clap, three claps. Choose individual children to repeat the pattern.
2. *Clapping Out a Story*—Have the children form a group and decide on the story and its method of expression. For example, the story might be, "I like school," to be interpreted as three claps evenly spaced. First they say the "story" accompanying it with claps, and later omit the words while recalling the clapping. The stories and clapping patterns can be varied in difficulty depending on the group.

3. *Counting the Sounds*—Have children form a group. Strike rhythm sticks on the piano, tap the floor, or clap hands. Then choose individual children to tell how many different sounds were made.

Play with puzzles, small blocks, and beads helps the child to learn to discriminate visually. Calling the child's attention to things which are "bigger," "smaller," "longer," "shorter," or "wider" help him to understand these words and to make finer visual discriminations. Children can develop the ability to see likenesses and differences by comparing objects in their environment or in pictures. As they mature, still finer discriminations are possible. The following exercises can also help to develop children's visual abilities.

1. Place several small familiar objects on a table and cover them with a cloth or piece of paper. Remove the cover, exposing the objects for a few seconds. Replace the cover and ask the children to name as many objects as they can recall. Gradually increase the number of objects exposed.
2. Place several objects on the table and have children look at them. Then have children close their eyes while one object is removed. Rearrange the remaining objects, then ask the children which object is gone.
3. Expose a simple pattern for a few seconds. Remove it and have children draw it from memory.
4. Expose a picture containing a number of items. Remove it and have children tell as many things as they remember seeing.
5. Describe some object and have children guess what it is. "I am thinking of something little and white with long ears and a short tail and pink eyes," for example. Encourage children to try to visualize the object while it is being described. Describe the clothes and appearance of some child until the children can guess who is being described.

Some enjoyable games played in the kindergarten can also help to develop children's perceptual abilities and mental alertness. Many of these are variations of the "exercises" described above.

1. *Lost Child*—One child is chosen to be policeman. He stands near the teacher with his back to the group and his eyes covered. Children and teacher choose a "lost" child. The teacher or a mature child describes the child to the policeman who then "finds" him in the group. The "found" child then becomes the policeman.
2. *Missing Child*—Children form a group. The child who is "it" first surveys the group and then closes his eyes. A child is chosen to leave the room. After he has left, "it" opens his eyes and tries to guess who has gone. If he succeeds, that child becomes "it." If "it" fails to name the missing child, he closes his eyes while the child returns, then attempts to guess who has returned. If he fails at this, he is "it" again.
3. *A Trip to the Store*—One child begins by saying he went to the store (any kind of store) to buy something, such as cake. The next child repeats the sentence and adds another item. "I went to the store and bought cake and bread." The next child repeats what has already been said and adds another item. Children vary in their ability to recall, but many may be able to repeat six or eight items from memory.
4. *Find the Missing Color*—Crayon, paints, or paper of various colors are placed in a row. Children study them. One child covers his eyes while one color is removed. The child uncovers his eyes and tells the missing color. Difficulty may be increased by removing more than one color if the children know their colors and are rather mature.
5. *Find the Missing Object*—The children form a group, one child covering his eyes while another hides a small object

somewhere in the room. The child uncovers his eyes and starts to look for the hidden object. The group gives him hints by loud clapping when he comes near the object and soft clapping when he is further away.

6. *Imitation*—The children form a group. One child is chosen to go about the room and do something; for example, he may take a book from the library corner and put it on the piano. Individual children may be chosen to "imitate" the first child or to tell what he did.

That perceptual abilities can be increased with specific training has been demonstrated by at least one group of experimenters. Researchers at the National College of Education in Evanston, Illinois, set up a situation in which a group of five-year-old children was given specific training to develop perceptual abilities. This training, it should be noted, was given in a kindergarten environment already rich with many other informal learning opportunities. Kodachrome slides were presented for 20 fifteen-minute periods in the space of four months. At first, simple designs were flashed at $\frac{1}{100}$ second by means of a tachistoscope and silver screen. Children were given an opportunity to reproduce the designs on a blackboard. Later, photographs of animals, boats, airplanes, etc. were used and children were asked to describe the pictures. Four or five paintings were photographed to make a series which told a story. These were flashed in sequence, allowing one half second for each exposure. After the entire series had been shown, children were asked to retell the story, putting consecutive incidents as they appeared in the series. By the end of the experimental period children were being shown pen and ink designs and line drawings and asked to identify the design they thought they saw by circling it on a duplicated sheet of paper. (This was the first formal experience with a crayon and paper task that the children had had in school.)

On the basis of this and other rapid-recognition programs

for young children, the experimenters concluded that perceptual training "promotes rapt attention so essential to successful learning of any subject matter or skills" and that it increases the child's interest in school and in learning because it improves his chances of success.³

Despite the apparent success of these programs, many people object to such highly structured procedures in the kindergarten. Ilse Forest, an opponent of formalized instruction as preparation for reading, warns, "It is only too easy for the unimaginative adult to exploit the five-year-old's eagerness to learn; it takes far less effort to conduct formal conversations with building readiness-for-reading in mind and to plan other teacher-directed activities than it does to provide a richer play environment, with a greater variety than that provided for the fours, and a greater incentive to try and explore and to discover to the limit of five-year-old ability."⁴

Mental Factors in Readiness

Although the mental age necessary for success in first-grade activities may vary with the skill of the teacher, the materials available, the size of the class, and other factors, a mental age of six years, six months, is generally accepted as necessary for success in beginning reading.⁵ The average four- or five-year-old, of course, is as far from this in mental age as he is in chronological age. But some children entering first grade will have a mental age considerably above this established minimum—and some, of course, will fall far below it. Whether kindergarten attendance

³ Louise Davis, Vivienne Ilg, Martha Springer, and Doreen Hanch, *Perceptual Training of Young Children*, Bulletin No. 56, A Monograph on Language Arts, Evanston, Ill., National College of Education, Row, Peterson, 1949.

⁴ Ilse Forest, *Early Years at School*, New York, McGraw-Hill, 1949, p. 59.

⁵ See, among others, Mabel Morphett and Carleton Washburn, "When Should Children Begin to Read?" *Elementary School Journal*, March 1931, XXXI, 498-503; and Gertrude Hildreth, *Readiness for School Beginners*, Yonkers, N. Y., World Book, 1950, p. 255.

can raise the intelligence level of children has not been established (see pp. 30-32). We do have evidence to show that in a starved environment the intelligence of children seems to drop.⁴ This, of course, does not mean necessarily that in a rich environment intelligence will be raised, but it is only reasonable to suppose that an environment so designed that children develop to their maximum capacity will help to get them ready for more formal school activities.

Social Factors in Readiness

The kindergarten plays a significant role in helping children adjust socially to the school situation—a significant aspect of readiness for learning. Bergamini and Swanson,⁵ among many other investigators, found that children who had had kindergarten experience were more successful in first grade than those who lacked this advantage. They concluded that the greater success of the kindergarten-trained group was due in large part to their ability to get along with others and to respect their rights.

Emotional Factors in Readiness

The child who is emotionally immature is not ready for the work of the first grade. The kindergarten teacher can help children develop a feeling of greater security by teaching them certain skills which will help them find their place in the group. Many children will need a great deal of help in such rudimentary skills as learning to listen while others speak, taking turns, and sharing with other children. In every kindergarten some children will attempt to solve their problems by temper tantrums or physical violence. Such children need to learn more mature be-

⁴ Willard Valentine, *Experimental Foundations of General Psychology*, rev. ed., New York, Farrar, 1943, p. 132.

⁵ Y. Bergamini and W. Swanson, "Does Kindergarten Make a Difference?" *School Executive*, December 1954, LXXIV, 54-55.

havior before they can succeed in school. Timid and fearful children need help in being able to participate with their peers. At least one study gives evidence that teaching children some special skills helps them to adjust more adequately to the group.*

A gain in skills can change the child's attitude toward himself, an essential preliminary to behavior change. Children should leave the kindergarten feeling that first grade is a new and challenging experience to be anticipated with pleasure rather than a frightening one that is to be avoided.

First-grade teachers can help by introducing kindergartners to the first-grade environment. At the University of Florida Laboratory School, the kindergarten children are invited to visit the first grade toward the end of the year and ask questions concerning the work there. This experience appears to make children more eager to go to first grade.†

The Experiential Background

Experiential background is another factor affecting readiness for first-grade activities. Some children come into the kindergarten having had few experiences beyond their own backyard. Others come into the kindergarten with extensive backgrounds of travel and information. Some children have had little or no experience with books; some come from homes where much reading is done. These differences in backgrounds will affect not only the child's store of information and experiences but his attitudes toward books and education as well.

The good kindergarten teacher tries to provide some common core of experience for children so that they are better able to profit from later school work. Increased experience with all

* L. M. Jack, "An Experimental Study of Behavior in Preschool Children," in L. M. Jack et al., *Behavior of the Preschool Child, Studies in Child Welfare*, Iowa City, University of Iowa Press, 1934, IX, 9, 7-65.

† Ruth B. Peeler, "Helping the Kindergarten Get Ready for First Grade," *Elementary English*, April 1955, XXXII, 221-23.

manner of things in their environment will supplement the meager supply of information which many children bring to school. With added experiences come new words to describe them.

In addition to first-hand experiences, the teacher provides vicarious experiences through pictures and other materials. She also gives them many opportunities to use language. Children make up a story about the pictures. They compose group letters to thank people for favors or to greet children who are ill. They formulate plans for parties and make rules for games. All these activities add to their ability to understand words, to use them, to put them together in meaningful form. They help children learn to organize their ideas and to communicate them to others.

Signs and other written material should be used in the kindergarten as much as possible, provided that they are functional. Signs used to identify the child's work, to label equipment, to caption pictures, or to list tasks to be done show children that written symbols are useful. By the end of the kindergarten year some children will ask the teacher to write a "story," which they dictate, under the pictures they have drawn.

Books are an important part of the kindergarten environment. Through his experiences with them in the kindergarten the young child learns that books are fun, that they are interesting and satisfying. A cheerful library corner, where books are attractively arranged, invites children to spend some time looking at books. The kindergarten teacher can help children learn good library manners, such as washing their hands before using books, holding books properly, turning pages without tearing them, and replacing the books carefully on the shelves. Often the occasion arises for calling attention to the fact that we read from left to right and from top to bottom. Through the opportunity afforded by the kindergarten library corner the child develops an interest in books even though he cannot yet fathom their meaning.

Most children enter kindergarten with great curiosity about and interest in reading. If this interest is carefully nurtured, with maturity and experience, the child can easily develop the skill later without loss of enthusiasm. When the child has developed a liking for books he has taken a large step toward readiness for reading. If the kindergarten teacher can send her children on with a desire to learn to read, she has helped the first-grade teacher immeasurably. We do not wait until the child discovers reading for himself. Rather, we help him grow into it by reading stories, by providing picture books, and by furnishing opportunities for the development of oral expression.

Building an extensive background of experience is especially important in developing readiness for reading. At one time it was assumed that children acquired this experiential background through reading. Now we reverse the process; instead of assuming that children get experiences from the printed page, we believe today that the young child needs to bring experiences to his reading in order to interpret what he is reading. The very basis of reading, according to modern investigators, is investing abstract symbols with meanings already familiar to the child in oral language. Experiencing and reading go along together throughout the school years.

Sex Differences in Reading Readiness

In most tests of general information, from kindergarten to college, males rank superior to females. According to Goodenough,¹⁰ this may be because boys tend to have more curiosity, or because they have greater freedom to explore their environment than girls, who at a very early age are expected to be interested in things closer to home.

Despite their superior informational background, boys as a

¹⁰ Florence Goodenough, *Developmental Psychology*, New York, Appleton-Century-Crofts, 1945, pp. 399-401.

rule have greater difficulty with many school tasks, particularly reading and writing. This may be the result of maturational differences or it may reflect, as Durrell¹¹ suggests, the fact that "girls spend more time in many types of quiet play in which the auditory and visual perceptions of words are developed." According to Martin and Stendler,¹² "Some of these boy-girl characteristics such as rate of maturation are obviously due to inherent differences between the sexes. . . . We know that a certain degree of mental maturity is necessary before children can learn to read; boys, because they mature more slowly, may reach this point on an average later than do girls. Yet both are taught reading at the same time and expected to achieve comparable success. Part of the difficulty may be that the slower maturing boy is not ready for some school learnings and that his initial failure because of his lack of readiness handicaps later progress."

There appears to be general agreement that girls mature earlier than boys, but the extent to which differences are attributable to cultural expectations is not measurable. Therefore one can only speculate concerning their role in the differences between boys and girls.

Even though we do not yet know the reasons for these differences, we need to recognize them and to plan our teaching accordingly. This may mean providing a longer period of pre-reading activities for boys; it may mean putting less emphasis on written language activities until boys have matured sufficiently to master the difficult task of writing. It has even been suggested that boys start school at a later age than girls. No solution has yet been devised that is accepted by all educators and psychologists. Until a universally feasible method of handling the problem is developed, this will remain one of the many areas in which the classroom teacher will have to take her cue

¹¹ Donald Durrell, *Improving Reading Instruction*, Youkers, N. Y., World Book, 1956, p. 43.

¹² William Martin and Celia B. Stendler, *Child Development*, New York, Harcourt, Brace, 1952, p. 227.

from the children themselves, doing whatever seems wise to her in light of her knowledge of her pupils.

Problems for Discussion

1. Visit a kindergarten and observe the activities in which boys seem to excel as contrasted with girls. How do boys compare with girls in skipping? in coloring?
2. How might you plan a study to determine whether attendance at kindergarten raises the I.Q. of children? What factors would need consideration? What factors would you have to control?
3. Assume that you are a first-grade teacher. Plan a visiting day for kindergartners in your room.
4. What are the skills demanded of children in the curriculum of the elementary school? Does the curriculum seem to "favor" boys or girls in this respect? If you think such favoritism exists, how would you alter the curriculum or school program to overcome it?
5. It has been suggested by some educators that boys start school a year later than girls so that they would be better able to compete with girls. What advantages would result from this plan? What disadvantages?
6. Mrs. Tate keeps all the books in her kindergarten on high shelves where children can't reach them. She says her children come from poor homes and have no "standards" for using them. How would you answer Mrs. Tate?

Suggested Additional Reading

- Almy, Millie G., *Children's Experiences Prior to First Grade and Success in Beginning Reading*. Contributions to Education, No. 954, New York, Bureau of Publications, Teachers College, Columbia University, 1949.
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- Readiness for Learning*. Washington, D. C., Association for Childhood Education International, 1941.
- Readiness for Reading and Related Language Arts*. Chicago, National Council of Teachers of English, 1950.
- Reiss, Anita, *Number Readiness in Research: A Survey of the Literature*. Chicago, Scott, Foresman & Company, 1948.
- Schoeppe, Hermina A., "The Reading Readiness Program in the Kindergarten." *Education*, February 1954, LXXIV, 6, 377-81.
- Sutton, Rachel S., "A Study of Certain Factors Associated with Reading Readiness in the Kindergarten." *Journal of Educational Research*, March 1955, XLVIII, 531-38.

Appendix

Publishers of Informational Materials

- American Association for Mental Deficiency, Mansfield Depot, Conn. Publishes a directory of private schools for retarded children, giving location of schools, kinds of children accepted, and charges. Price 75¢.
- Association for Childhood Education International, 1200 15th St. NW., Washington 5, D. C. Publishes the monthly (September through May) *Childhood Education* and occasional pamphlets related to the teaching of children. A publication list is available on request.
- Association for Supervision and Curriculum Development, 1201 15th St. NW., Washington 6, D. C. Publishes the monthly (October through May) *Educational Leadership*, containing many articles concerning the problems of teachers and schools; occasional pamphlets; and a yearbook.
- Child Study Association of America, 122 E. 4th St., New York 21. Publishes *Child Study, A Quarterly Journal of Parent Education*, containing many articles on mental hygiene; and occasional pamphlets.
- National Association for Mental Health, Inc., 1790 Broadway, New York 10. Publishes the quarterly *Understanding the Child*, an excellent source of information concerning mental hygiene written for the layman.
- National Association for Nursery Education, Roosevelt College, 430 Michigan Ave., Chicago 5. Publishes a quarterly bulletin containing

articles on nursery-school problems and legislation affecting them; and occasional pamphlets.

National Association for Retarded Children, 99 University Pl., New York 3. Publishes booklets and other information helpful to parents of retarded children.

Public Affairs Committee Inc., 22 E. 38th St., New York 16. Publishes brief and simply written materials on subjects of general public concern, including several recent pamphlets on education and understanding children.

United States Children's Bureau, Supt. of Documents, U. S. Gov. Printing Office, Washington, D. C. Publishes *The Child*, a bimonthly magazine containing summaries of health and welfare activities in behalf of children; and a series of free pamphlets on child care.

United States Office of Education, Federal Security Agency, Washington, D. C. Publishes the monthly *School Life*, pamphlets on various aspects of the school program, and periodical summaries of information related to the extension of nursery schools and kindergartens.

Selected Films and Filmstrips¹

A Child Went Forth. Brandon Films Inc., 200 W. 57th St., New York, 20 min., b&w. Depicts the idea of freedom within sensible bounds by showing a child in camp; emphasizes the role of camp life in the child's growth.

A Class for Tommy. Bailey Films Inc., 6509 De Longpre Ave., Los Angeles 28, 20 min., b&w. Story of an experimental training class for young mentally retarded children.

A Day in the Life of a Five-Year-Old. Bureau of Publications, Teachers College, Columbia U., 525 W. 120th St., New York, 20 min., b&w. Shows children interpreting the world about them and the teacher's role in guiding them through a happy and satisfying day.

A Long Time to Grow, Part II. Film Library, New York U., Washington Square, New York, 35 min., b&w. Shows four- and five-year-old children at work and play.

Answering the Child's "Why." Encyclopaedia Britannica Films, 202 E. 44th St., New York 17, 13 min., b&w. Dramatizes situations in which children meet with positive and negative attitudes toward their questions and suggests effect on the child of each.

¹ Most of these films are available at university centers.

- Baby Meets His Parents.* Encyclopaedia Britannica Films, 202 E. 44th St., New York 17, 11 min., b&w. Shows how personality is influenced by human relationships and environmental factors experienced during the first years of life.
- The Child Grows Up.* Knowledge Builders, 31 Union Sq., New York, 10 min., b&w. Describes the activities of a normal child from one year old to six years old, emphasizing habit training and proper play and equipment for developing mind and body.
- Children Growing Up with Other People.* United World Films, Inc., 1445 Park Ave., New York, 30 min., b&w. Illustrates the stages of growth in children from self-centeredness to realization of responsibility to others.
- Design for Growing.* U. S. Information Agency, 250 W. 57th St., New York, 33 min., color. Shows the role of the school in developing creativity in children.
- Family Circles.* McGraw-Hill Films, 330 W. 42nd St., New York, 31 min., b&w. Depicts the interplay of home and family in the development of children.
- Fears of Children.* Film Library, New York U., Washington Sq., New York, 30 min., b&w. Shows conflict between parents in handling a five-year-old and the effect of this conflict on the child.
- Finger Painting.* Film Library, New York U., Washington Sq., New York, 5½ min., color. Shows experienced and inexperienced children using finger paints and some techniques for stimulating the creative energy of children.
- Frustration Play Techniques.* Film Library, New York U., Washington Sq., New York, 35 min., b&w. Shows normal personality development in young children and special techniques for diagnosing normal behavior.
- He Acts His Age.* McGraw-Hill Films, 330 W. 42nd St., New York, 15 min., b&w. Shows typical behavior of children from ages one to fifteen; shows that, as the child grows, his interests, activities, and emotions change.
- House of the Child.* Contemporary Films Inc., 13 E. 37th St., New York, 25 min., b&w. Shows the program for children three to nine years old in bicultural school in New York City.
- How to Make and Use the Felt Board.* Teaching Aids Laboratory, Ohio State U., Columbus, 53 fr., color, fs. Tells how to make this useful teaching device.

- Individual Differences.* McGraw-Hill Films, 330 W. 42nd St., New York, 23 min., b&w. The case study of a shy slow child contrasted with the more socially adept older brother; demonstrates the need for recognition of differences among children and the role of the school in meeting them.
- It's a Small World.* Communications Materials Center, Columbia U. Press, 2960 Broadway, New York, 38 min., b&w. Shows the spontaneous reactions of nursery-school children during an entire day.
- Kindergarten and Your Child.* Wayne State U., Detroit, 40 fr., b&w, fs. Shows the objectives and the activities of the kindergarten and how parents can help to adjust their child to school.
- Let Us Grow in Human Understanding.* Harmon Foundation Inc., 140 Nassau St., New York, 30 min., b&w, si. Shows how specialists in child development, working with parents, discover what children need for wholesome development in the modern community.
- Life with Junior.* March of Time, Child Study Association of America Inc., 132 E. 74th St., New York, 18 min., b&w. Shows the typical day of a child, following him through sketchy washing, a wolfed breakfast, and a dawdling trip to school; stresses the need for development of each child's potentialities.
- Preface to Life.* United World Films Inc., 1445 Park Ave., New York, 29 min., b&w. Shows the influence of parental expectations and attitudes on the child.
- Report in Primary Colors.* Virginia Education Board Department, Richmond, 33 min., color. Shows creative activities in the primary grades, stressing the integration of these activities with other school experiences.
- Shyness.* McGraw-Hill Films, 330 W. 42nd St., New York, 23 min., b&w. Shows how three shy children became part of a group.
- Social Development.* McGraw-Hill Films, 330 W. 42nd St., New York, 16 min., b&w. An analysis of the social behavior of children at various age levels, showing the underlying changes in behavior patterns as the child develops.
- Story Telling: Can You Tell It in Order?* Coronet Films, 488 Madison Ave., New York, 11 min., b&w. Shows a teacher using a puppet clown, a blackboard, and mounted pictures in teaching primary-school children to organize events in sequence when telling a story.
- Teacher Observation of School Children.* Metropolitan Life Insurance Co., Inc., 1 Madison Ave., New York, fs, accompanied by 33½ rpm record. Shows how the teacher observes children for signs of illness.

- The Child at Play.* Bureau of Publications, Teachers College, Columbia U., 525 W. 120th St., New York, 18 min., b&w. Depicts a day in the life of a child, stressing his spontaneous play.
- The Frustrating Fours and Fascinating Fives.* McGraw-Hill Films, 330 W. 42nd St., New York, 22 min., b&w. Shows the development of the child from almost total dependence on adults to vigorous self-assertion and increasing independence.
- The Kindergarten Way Is to Learn Each Day.* Books That Talk Program, C. R. Peterson, San Diego, Cal., 20 min., color, over 60 fr., fs. Demonstrates the benefits of dramatic play, show-and-tell, manipulative activities, educational trips, storytelling, and other kindergarten activities.
- This Is Robert, Parts I and II.* Film Library, New York U., Washington Sq., New York, 80 min., b&w. Shows the development of an aggressive child from early nursery school to the first year in public school.
- Tips for Teachers.* Jam Handy Organization, 2821 E. Grand Blvd., Detroit 11, 20 min., b&w. Explains the role of the teacher in the learning process and shows that the teacher needs to be a showman, a salesman, and an actor to help children learn.
- Understanding Children's Play.* Film Library, New York U., Washington Sq., New York, 10 min., b&w. Shows that adults can guide children more effectively if they understand the nature of play.

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